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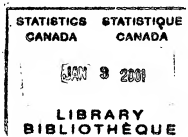
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Canadian
Life Tables

1931

by

NATHAN KEYFITZ



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PREFACE

In this volume are published the first Canadian Life Tables issued under official imprimatur. The Registration Area of Canada was extended to include the nine provinces only in 1926; previous to the 1931 Census, therefore, no national Life Table could be constructed, using, as is now the almost universal practice, deaths of the three years about the census date.

As the figures of deaths for the Yukon and the Northwest Territories are not on the same comprehensive basis as those of the nine provinces, they were not included for the purpose of these tables.

Life tables are popularly associated with life assurance, but this is only one of their many uses by statisticians, sociologists, medical health officers and the population at large. Age structure and mortality contain so many different elements which are important in themselves that a single average such as mean age or a single mortality rate (even when standardized) is inadequate for purposes of description or investigation, the attributes of each year of age in relation to the other years being essential. The most suitable vehicle for the presentation of the mortality attributes of age is the life table.

The tables that follow are discussed in a general way in the accompanying text. Among points referred to are (1) the considerable differences in mortality between the sexes; (2) the differences between Canada's regional divisions, which exist most markedly at the middle ages of life; (3) differences between Canada on the one hand and England and Wales and the United States on the other, Canada showing on the whole a considerably lower mortality; (4) a comparison of mortality in the Registration Area of 1921 (i.e., Canada excluding Quebec) with mortality for the same area in 1931, showing a definite decline in mortality rates at all but senile ages. The last point seems to indicate that the improvement in mortality is not by way of lengthening in old age the bridge of life referred to in the vision of Mirzah, but rather of making safer the march along its span.

The tables have been prepared by Mr. Nathan Keyfitz of the Social Analysis Branch of the Bureau. They are a part of the Census Monograph project which is under the direction of Mr. M. C. MacLean. Mr. P. F. Keyes and Mr. C. E. Kraemer assisted in the numerical computation, and Miss E. M. Carmichael edited the manuscript.

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JULY 21, 1937.

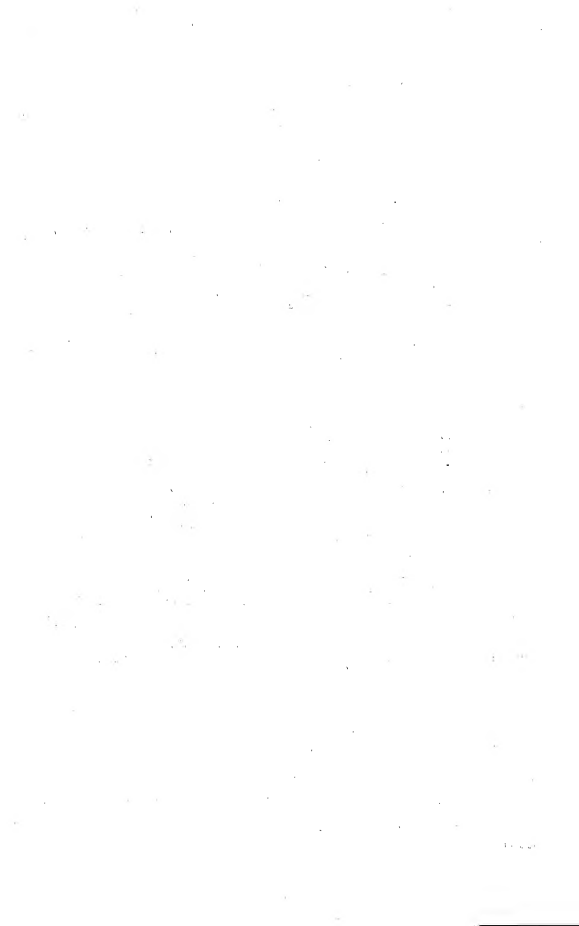


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INTRODUCTION

METHOD OF CONSTRUCTION

(1) **Population Involved.**—Canadian Life Table No. 1 takes account of all persons who were included in the Census of 1931 as residing in the nine provinces of Canada. The population and deaths of the Yukon and the Northwest Territories were excluded as it was felt that their vital statistics are not yet on the same reliable basis as those of the rest of Canada. Their omission leaves 10,362,833 out of a total population of 10,376,786 for the "exposed to risk".

(2) **Tables Constructed.**—The original intention was to construct a separate table for each sex for each province, and for each sex for Canada, making twenty tables in all, for 1931. This scheme was modified, because there was considerable room for doubt as to the meaning that could be attached to tables for groups as small as some of the provinces singly. (See section on "Precision", p. 11.) In the Maritime and Prairie Provinces individually the deaths fluctuated widely from year to year, even when taken in broad age groups. There was some doubt as to whether British Columbia offered a sufficiently large number of exposures for the construction of a reliable table (i.e., a table that would give with precision the probabilities of death in other calendar years than the ones chosen) but as there was no other province with which it could be conveniently amalgamated it was graduated separately. Therefore the following tables were constructed for each sex: Canada, the Maritimes, Quebec, Ontario, the Prairie Provinces and British Columbia. Death rates at quinquennial age groups are given for the individual Maritime and Prairie Provinces.

Though no Dominion-wide vital statistics existed in 1921, there was a Registration Area for births and deaths that included eight out of the nine provinces. A table has been prepared for this area for 1921, both for males and for females; it is not, of course, comparable with the table for 1931, since the second largest province, Quebec, was omitted, and since the mortality of Quebec is quite different from that of the rest of Canada. For purposes of comparison a table has been compiled for the same area on the basis of deaths of 1931.

(3) **Exposed to Risk.**—No adjustment was made to obtain the mean population for the years 1930, 1931, 1932, to a greater degree of accuracy than was given by the census population for the date June 1, 1931. In view of the extremely uneven nature of Canada's growth during the decade 1921-31, it was believed that a more or less elaborate method such as that of A. C. Waters would give no better result than the unadjusted census figures. For a country of relatively stable population such a method may be suitable; for Canada its applicability is doubtful.*

(4) **Not Stated Ages.**—As there is, in general, a larger proportion of persons of "not stated" age among the dying than among the census population, a slight error of under-statement in the mortality rates would result from the uniform disregard of the "not stated" age classification. The unstated ages were therefore distributed throughout the various age groups, by means of a factor applied to the rates of mortality.

(5) **Radix.**—It has been observed in the censuses of Canada as well as of other countries that the number of individuals at the younger ages of life, particularly ages 0, 1 and 2, tends to be under-stated and therefore it has been the custom to make use of birth statistics in the calculation of the population exposed to the risk of death at these ages. At the same time it was felt that it would be wise to make some tests of the accuracy of birth registrations before proceeding to calculate the probabilities of death at the ages 0-5. This is particularly important for the present purpose if the tables for the different geographic areas of Canada are to be compared. In a separate section will be found the probabilities of death by months for the first year of life and by years for ages 1-5, for Canada and its five regional divisions, for males and females, to correspond to each of the tables here presented. The columns l_x , d_x and ${}_x q_x$ are also carried back to age 0. Here the "number living" column is started at 100,000 at age 5, provisional crude q_3 , q_4 , being used along with crude q_5 , q_6 , q_7 and q_8 to obtain final q_5 .

*In the Life Table for England and Wales for 1931, where the period from census date to mid year was 65 days, and population more stable than in Canada, Sir Alfred Watson, Government actuary, concludes "... any adjustment of the census figures of 1931 to approximate the population recorded at each age to that existing at 30th June of that year would be unlikely to produce any more dependable figures than those of the census itself."

(6) **Grouping.**—There has been considerable discussion of the effect of grouping in osculatory graduation*; different authorities have held different views of the relative suitabilities of the five possible arrangements. The grouping 5-9 is used here for the following reasons:—

(i) It balances the numbers 5 and 8 against 10, putting into different groups the most popular number and the two next most popular ones.

(ii) It is the grouping most frequently adopted for the presentation of age statistics, and therefore most suitable for a method which may be used for the construction of comparable life tables for other divisions of the Canadian population.

(iii) It is the grouping in which the statistics are already aggregated, though they are also given for single years of age.

(iv) In the course of the tests that were performed no other grouping seemed to have any striking advantage over it.

(7) **Method of Graduation.**—The method followed was that of George King, which consists in obtaining pivotal values at quinquennial intervals and interpolating by a third degree osculatory formula between these values. This method has been found suitable for most life tables made from population statistics; it gives values which are very smooth and at the same time reflect all the essential characteristics of the original data. A slight departure was made from the usual custom by the introduction of an unsymmetrical formula for the pivotal value at the beginning of the curve, i.e., at age 7. As the unsymmetrical values used came in all cases very close to the crude values it was hoped that greater accuracy would be obtained by thus shortening the interval over which it has been the practice to use Lagrangian interpolation.

(8) **Formulae.**—Briefly summarized, King's method of graduation using third differences is as follows:—

After the aggregation of population and deaths into five-year age groups pivotal values of numbers living and dying are calculated by the now well-known formulae

$$u_{12} = .216 w_{10} - .008 (w_5 + w_{15}),$$

$$u_{17} = .216 w_{15} - .008 (w_{10} + w_{20}), \text{ etc.}$$

where u_x is the number between age x and $x + 1$ and w_x the number between x and $x + 5$.

The number dying at the pivotal ages is divided by the number living and from the result, which is m_x (the central rate of mortality), the rates q_x , where $q_x = \frac{2m_x}{2 + m_x}$, are worked out.

From the first, second and third differences between the pivotal values (Δq_x , $\Delta^2 q_x$, $\Delta^3 q_x$) the first, second and third differences between consecutive q_x 's (δq_x , $\delta^2 q_x$, $\delta^3 q_x$) are worked out for each block of five values 7-11, 12-16, etc., by the formulae

$$\delta q_x = .2\Delta q_x - .08\Delta^2 q_{x-5} - .016\Delta^3 q_{x-5},$$

$$\delta^2 q_x = .04\Delta^2 q_{x-5} - .016\Delta^3 q_{x-5},$$

$$\delta^3 q_x = .024\Delta^3 q_{x-5},$$

and the values of q_x are filled in by addition.

(9) **Younger Ages.**—The unsymmetrical third degree formula

$$u_7 = .192 w_5 + .016 w_{10} - .008 w_{15}$$

gave a satisfactory value for the population and deaths of age 7. Thus the values of q_x at ages 7, 12, 13 were at hand. As it had been decided to commence the table at age 5, a value of q_5 was obtained from the crude rates by the seven-term smoothing formula below where q'_4, q'_5, \dots, q'_8 use census figures for the exposed and q'_2 and q'_1 birth registrations.

$$q_5 = \frac{-2q'_2 + 3q'_3 + 6q'_4 + 7q'_5 + 6q'_6 + 3q'_7 - 2q'_8}{21}.$$

A third degree curve $q_x = \alpha' + \beta x + \gamma \frac{(x)(x-1)}{2} + \delta \frac{(x)(x-1)(x-2)}{3}$ was put through the four

values then available, q_5, q_7, q_{12}, q_{13} . Tests showed that the points on this curve passed very close to the crude values†.

* Grouping and interpolation are for the purpose of distributing inaccuracies due to the tendency of the enumerated population to concentrate on even numbers and to smooth out roughness due to insufficient numbers exposed at each age.

† For the twelve tables for Canada and its regional divisions, the total net deviation of the q_x found by this method from the crude q_x for ages 5 to 12 was .00046; the sum of the absolute values of the deviations was .01348.

(10) **Termination of Tables.**—No universal method of graduating the older ages of a life table has yet come into use, and most of the existing methods have a considerable measure of uncertainty and arbitrariness. Nor does there seem to be any pressing need for extreme accuracy in the graduation of the ages over 90, since for one thing few persons are exposed and, therefore, the law of large numbers does not come into effective operation, and for another, such people as are alive or dying at those ages include many cases of over-statement of age which can be separated by no mathematical method from the accurate data. It has been claimed that this over-statement occurs to the greatest extent in less educated communities. This tendency shows itself in the completed table in unusually favourable mortality at the ages over a hundred and, therefore, in a drawing out of the life table to a very old age. For example, in the United States' Life Tables of 1910, the Negro males' table ended at the age of 107 and the table for White males at the age of 105. In 1930 the White females' table for the United States ends at 105, the Negro females' table at 108. At all points of the table below 79 for 1910 males and below 74 for 1930 females, the White population shows far more favourable mortality than the Negro population—at most places less than one-half the risk of death. It is hard to account for this differential at the ages over a hundred except on the supposition of an over-statement in the census and death records on the part of the Negroes.

The procedure often followed for the termination of a life table, when the main body of the table is constructed by the method of George King, is to pass a curve through ages 86, 87, 92, and some age arbitrarily taken (105, 110, or 115) as the extreme upper limit of life at which the rate of mortality is assumed to be unity, or the probability of dying within a year certainty.

In these tables no such upper limit has been used. It was felt that if the older ages had any significance at all (for the purposes of comparisons between different regions of Canada, for example) the tables should be allowed to terminate themselves. Besides, in these tables, as in the English Life Tables of 1931, it was found that in many cases a fourth degree curve put through the points mentioned above did not increase monotonically between age 92 and 110, but decreased and increased again, or, in at least one case, over-shot the mark of 1.00000 before age 110 and reached 1.00000 at 110 from above. These results were so absurd as to be immediately rejected. The method actually used was felt to be somewhat less artificial; it consisted in putting a fourth degree curve through the points for ages 81, 86, 87 and 92, and then following this curve for the construction of the l_x and d_x columns as far as was necessary. Thus the curve of the probability of dying reached the value of 1.00000 at different ages for the different tables; the actual mortality involved in the table dictates the age at which the chances of dying in the course of a year would be certainty. For most of the tables for Canada and its regional divisions, this point was reached between the ages of 108 and 115; for one or two of the tables, at somewhat higher ages. In the two or three cases where the pivotal value of 92 was so low that the entire curve was pulled down and became negative, the value at this point was disregarded and a third degree curve put through the points 81, 86 and 87. In no case was a pivotal value beyond 92 used, as it appeared on examination that the pivotal values for age 97 had little relation to the mortality that could reasonably be expected in the various regions for the two sexes. Hence no figures of population or deaths beyond age 100 are involved in any of the following tables; in all cases rates beyond those ages are projections of earlier mortality.

FUNCTIONS TABULATED AND THEIR USES

(11) **Principal Functions Tabulated.**—For Canadian Life Table No. 1, Males and Females, the principal functions tabulated are:—

- (1) l_x , the number living at the beginning of the year of age in an artificial population which contains 100,000 persons at age 5,
- (2) d_x , the number dying during the year of age x ,
- (3) q_x , the probability of dying during the following year for a person aged x ,
- (4) e_x , the complete expectation of life of a person alive at age x ,
- (5) p_x , the probability of living to the end of the year of age for a person alive at age x ,

(6) L_x , the average number of persons of age x at any given moment in the artificial population of the life table,

(7) T_x , the total number of persons age x or older. We have $T_x = \sum_{t=0}^{w-x} L_{x+t}$.

For the regional tables only columns 1, 2, 3 and 4 above are tabulated.

In addition the probabilities of dying at quinquennial ages are shown for the individual Maritime and Prairie Provinces (Table 3). Comparisons are given between Canada and its regional divisions (Table 4) by means of the function $1-q_x$, the probability of dying within five years. Comparisons are shown in considerable detail between the Canadian Life Table No. 1 and the official tables of England and the United States (Table 5); in somewhat less detail between Canadian Life Table No. 1 and the rates of mortality of a number of other countries (Table 6). In addition there are presented tables for the Registration Area of 1921, for the deaths of 1921 and 1931 (Table 9); finally, the function q_x , the chance of dying in a year, is given for the deaths of the decennium 1921 to 1931 (Table 10). Of this last table more will be said later. In the Appendix, the populations and deaths relevant to the tables for Canada and its regional divisions and to the tables for the Registration Area of 1921 are assembled from the original volumes of the census and the vital statistics.

Since in certain calculations (e.g., of the net reproductive ratio), the value of l_0 is necessary, it is given below, calculated by the method of the English Life Tables:—

Regional Division	Males	Females
Canada.....	113,035	110,449
Maritime Provinces.....	112,978	110,585
Quebec.....	118,339	114,559
Ontario.....	110,231	108,214
Prairie Provinces.....	110,020	107,923
British Columbia.....	107,951	106,535

The exposed are found from births for ages 0-3.

(12) **Assurance and Annuity Calculations.**—Contrary to the popular notion, the assurance companies do not, in calculating the value of a whole-life assurance, find the expectation of life for the given age and then proceed to find the present value, discounted for the term of the expectation of life, of the amount of the assurance. This would give an answer which is considerably lower than the true value. What the companies do is to analyse the probabilities in detail; they take the probability of a man dying in the year immediately following the inception of the assurance, multiply the amount at risk by this probability and by a factor which discounts the amount of the assurance from the end of the year (the time at which all assurances are theoretically payable). Then account is taken in the same way of the probability of the assured dying in the second year of the contract, and the amount at risk is multiplied by the probability of death for that year and by a factor which discounts this amount over a period of two years. Similar calculations are made for each of the subsequent years of life and the results are added. In an annuity for life the same process is used except that instead of the probability of dying the probability of living is used throughout. In the same way if the annuity or assurance is to continue for only a limited term of years, and not for the whole of life, only the probabilities for the years involved are used.

(13) **Commutation Columns.**—In order to avoid the tedium of carrying out each calculation in the manner described, commutation columns were invented. The basis of the commutation table is that the number living as given by the l_x column of the life table is multiplied by v^x and the number dying is multiplied by v^{x+1} giving D_x and C_x . These quantities are added from the end of the table backward, giving the columns $N_x = \sum_x D_x$ and $M_x = \sum_x C_x$ respectively. Then we have for the value of a whole-life assurance the quantity $\frac{\sum_{t=0}^{w-x} D_{x+t}}{D_x} = \frac{M_x}{D_x}$;

of a whole-life annuity $\frac{\sum_{t=0}^{w-x} C_{x+t}}{D_x} = \frac{N_x}{D_x}$. To find the value of an n -year term assurance or term

annuity we use $\frac{\sum_{t=1}^{n-1} C_{z+t}}{D_z}$ and $\frac{\sum_{t=1}^{n-1} D_{z+t}}{D_z}$ respectively, i.e., we add the discounted probabilities for the relevant term of years. But this can be obtained by merely deducting from the whole-life numerator the payments from the time when the annuity or assurance stops to the end of life, and thus we finally obtain the extremely convenient formulae $\frac{M_z - M_{z+n}}{D_z}$ and $\frac{N_z - N_{z+n}}{D_z}$ the actuarial symbols for which are $A_z : \overline{n}|$ and $a_z : \overline{n}|$. $A_z = \frac{M_z}{D_z}$ gives the cost of a whole-life assurance of one dollar if the payment is to be in a single instalment at the initiation of the contract. In the same way $a_z = \frac{N_z}{D_z}$ is the value of a whole-life annuity. But on this continent most assurances are paid for by means of life or term annuities. Thus the whole-life assurance, if the payment therefor is to be by means of a whole-life annuity, costs the buyer $\frac{A_z}{a_z} = \frac{M_z}{N_z} = P_z$ each year he is alive.

In the same way if the payments are to continue not for life but only for a specified term (n) of years, as in the popular 20-payment life policy, the division is not by N_z but by $N_z - N_{z+n}$, giving ${}_nP_z = \frac{M_z}{N_z - N_{z+n}}$ for the n -payment life and $P_z : \overline{n}| = \frac{M_z - M_{z+n}}{N_z - N_{z+n}}$ for the n -year term policy. In the case of a pure endowment, we merely need to multiply the probability of a man living the term in question by the discounted value of the sum of money which he will get if he does live. In symbols this is equal to $v^n \cdot p_z = v^n \frac{l_{z+n}}{l_z} = \frac{v^{z+n} l_{z+n}}{v^z l_z} = \frac{D_{z+n}}{D_z}$. If the payment for the pure endowment is to be by an annual premium for n years that premium is equal to $\frac{D_{z+n}}{N_z - N_{z+n}}$, the symbol for which is $P_z : \frac{1}{n}|$.

In the case of an ordinary endowment assurance policy, the amount of the assurance is to be paid either in the event of the assured's dying during n years, or living to the end of that period; the annual premium for this benefit is simply the sum of the term assurance and the pure endowment, or $P_z : \overline{n}| + P_z : \frac{1}{n}| = \frac{M_z - M_{z+n} + D_{z+n}}{N_z - N_{z+n}}$.

Thus the whole-life premium on the life of a man of 32 is $\frac{M_{32}}{N_{32}}$ per unit; the 20-payment life premium for a man of 47 is $\frac{M_{47}}{N_{47} - N_{67}}$ per unit; a 30-year endowment assurance for a man of 40 is $\frac{M_{40} - M_{70} + D_{70}}{N_{40} - N_{70}}$. If a man of 32 wants to be insured for 17 years and to pay premiums on the assurance for 12 years, the annual premium is $\frac{M_{32} - M_{49}}{N_{32} - N_{44}}$. If a man of 35 wants a life annuity to start at age 60 on which premiums are to be paid until age 54 the annual premium is $\frac{N_{60}}{N_{35} - N_{55}}$.

(14) A Technical Consideration.—These figures, it is to be emphasized, are the net rates that would be required for the assurance of a randomly chosen group of the Canadian population. They apply neither as office rates (i.e., rates constructed to include administration expense, expense of acquisition, etc.) nor even as net rates for an actual assurance office since its assured are not, in general, typical of the general population of Canada but are, on account of the method of their selection, a special class. In fact, so finely does selection act in this matter, that holders of different types of policies have appreciably different mortality.

PRECISION OF TABLES

The value of a set of tables such as these lies principally in the fact that they include a sufficiently large number of exposures to the risk of death to enable one to affirm that the same rates, or very nearly the same rates, will apply for the same population in other years than the ones used in their construction. To test the degree to which this holds for the tables here constructed, two tables were made up for the Registration Area of 1921, about the year 1931; one

including only the deaths of 1931 itself, the other taking account of deaths in the three-year period 1930-32. The pivotal rates of mortality (q_x) are given below, for the two sets of deaths.

I.—ANNUAL RATES OF MORTALITY (q_x) FOR THE REGISTRATION AREA OF 1921,
BASED ON DEATHS OF 1931 AND 1930-32

Age	Males		Females	
	Deaths of 1931	Deaths of 1930-32	Deaths of 1931	Deaths of 1930-32
7.....	·00183	·00191	·00127	·00142
12.....	·00134	·00145	·00129	·00131
17.....	·00231	·00242	·00186	·00201
22.....	·00299	·00311	·00291	·00294
27.....	·00328	·00328	·00324	·00336
32.....	·00343	·00331	·00353	·00357
37.....	·00392	·00411	·00447	·00434
42.....	·00508	·00506	·00434	·00483
47.....	·00682	·00688	·00616	·00629
52.....	·01020	·01015	·00833	·00882
57.....	·01495	·01514	·01279	·01324
62.....	·02170	·02217	·01947	·01918
67.....	·03412	·03491	·02890	·03024
72.....	·05256	·05488	·04028	·04751
77.....	·08378	·08747	·06004	·08000
82.....	·13025	·13550	·12027	·12480
87.....	·19147	·19634	·17332	·18017
92.....	·27078	·28641	·23554	·25857

It is plain that the two sets of rates, both for males and for females, are very similar.

Such inaccuracy as exists (in the sense of deviation from the "true" rates for an infinite population of which the population actually used is a random sample) is due principally to three causes:—

(i) First and foremost to the insufficiency of the numbers involved. The laws of averages only come partially into play. If, for example, there are 1,000 persons exposed to a risk of death which is exactly (let us say) ·01, then the expected number of deaths is 10. The chance is 1/3, however, that the observed number of deaths will be more than 13 or less than 7, that is 30 p.c. in error. If there are 1,000,000 persons exposed to the same risk (·01) the expected deaths are 10,000, but here the chance is only 1/3 that the observed deaths will be greater than 10,100 or less than 9,900, i.e., in error by 1 p.c. By multiplying the number of persons exposed by 1,000 we have increased the precision thirtyfold. Roughly speaking, where the probability of dying is small the precision is proportional to the square root of the exposed. Since England has four times the population of Canada, her probabilities of dying can be reckoned twice as accurately as ours.

(ii) Mis-statements of age in the census and death records. Many of these mis-statements, such as the tendency to concentrate on even numbers, balance out* and are cancelled in the process of graduation; others that bias the result on one side or the other cannot be eliminated by any mathematical means whatever.

(iii) Omissions in the census and death statistics. It may be asked whether in view of the possible errors in the probabilities of dying, the fundamental function of all the tables, the various functions based on the probabilities have been taken out to too many places of decimals. Certainly some, e.g., commutation columns, seem unnecessarily refined. The reason for such elaboration of rough data is partly technical and partly traditional. The technical reason is the desirability of obtaining smoothness in the final result so that mathematical processes such as differentiation and integration may be facilitated. If a curve is very rough its derivative (obtained as the difference between consecutive points) has no meaning. That is why q_x , the probability of dying, is presented to five decimal places (reduced from seven) when the original data could be adequately expressed by four. Another consideration is that by running a calculation from the original data through to the final result with only the accuracy of the former at each stage we would be introducing a cumulative error in computation.

* See 1931 Census Monograph *The Age Distribution of the Canadian People* by M. C. MacLean, also 1931 Census, Vol. I, Chap. III.

The two objectives in the construction of a life table are: (i) fidelity to the original data and (ii) smoothness. (i) is measured by calculating the expected deaths at each year of age (by multiplying the number of persons enumerated in the census by m_x , the central death rate) and comparing with the actual deaths in the vital statistics for 1930-32. (ii) is measured by the third differences of q_x . For the purpose of (i) the q_x of the final table (to five decimal places) was used to obtain m_x ; for (ii) the originally calculated q_x (to seven places) was used, and the resulting third differences were cut down to five places. For (i) the expected deaths have been multiplied by three to compare directly with actual deaths for the three-year period 1930-32. The results of the tests are given below for Canadian Life Table No. 1, males and females.

II.—COMPARISON OF ACTUAL DEATHS, CANADA, 1930-32 AND EXPECTED DEATHS
BY CANADIAN LIFE TABLE No. 1, (A) MALES, (B) FEMALES

Age	(A) Males				(B) Females			
	(1) Actual	(2) Expected	(3) Actual-Expected		(4) Actual	(5) Expected	(6) Actual-Expected	
			-	+			-	+
5	874	887	13	-	747	762	15	-
6	884	822	-	42	663	659	-	4
7	727	740	13	-	570	571	1	-
8	677	668	-	9	503	526	23	-
9	666	669	-	61	455	459	34	-
10	529	563	34	-	455	452	27	-
11	490	502	12	-	469	462	-	7
12	510	490	-	20	449	467	18	-
13	507	501	-	6	478	478	-	-
14	550	574	24	-	583	539	-	44
15	620	642	22	-	591	595	4	-
16	739	758	-	1	642	652	50	-
17	812	811	-	1	717	733	16	-
18	856	867	11	-	772	796	24	-
19	933	875	-	58	908	799	-	109
20	923	875	-	48	834	836	2	-
21	972	944	-	28	866	865	-	1
22	885	928	43	-	883	888	3	-
23	916	923	17	-	893	908	15	-
24	912	906	-	6	923	894	-	29
25	845	856	11	-	903	907	4	-
26	854	835	-	1	848	884	36	-
27	826	837	11	-	844	855	11	-
28	873	871	-	2	858	894	36	-
29	772	763	-	9	876	781	-	95
30	870	868	-	4	861	940	79	-
31	757	784	27	-	794	809	6	-
32	852	781	-	71	890	839	-	51
33	697	734	37	-	823	799	-	24
34	740	767	27	-	834	834	-	-
35	890	901	11	-	949	955	9	-
36	921	896	-	25	950	911	-	39
37	954	877	-	77	926	880	-	46
38	992	1,062	70	-	962	1,044	82	-
39	963	972	9	-	927	903	-	24
40	1,116	1,204	88	-	1,000	1,121	121	-
41	933	950	17	-	902	806	-	96
42	1,299	1,269	-	30	1,002	1,058	56	-
43	1,145	1,145	-	-	975	964	-	11
44	1,188	1,088	-	100	1,012	964	-	78
45	1,470	1,407	-	63	1,022	1,144	122	-
46	1,192	1,261	69	-	1,035	990	-	45
47	1,282	1,284	2	-	1,046	1,003	-	43
48	1,512	1,528	16	-	1,178	1,191	13	-
49	1,489	1,480	-	9	1,128	1,064	-	44
50	1,822	1,854	32	-	1,244	1,413	169	-
51	1,500	1,439	-	70	1,029	987	-	42
52	1,817	1,793	-	24	1,269	1,277	-	22
53	1,706	1,663	-	41	1,263	1,170	-	83
54	1,673	1,723	50	-	1,307	1,276	-	31
55	1,808	1,981	173	-	1,312	1,379	67	-
56	1,831	1,873	42	-	1,362	1,346	-	16
57	1,799	1,698	-	101	1,346	1,265	-	81
58	1,907	1,998	91	-	1,450	1,519	69	-
59	1,961	1,892	-	69	1,433	1,354	-	79
60	2,246	2,380	-	134	1,641	1,908	267	-
61	1,833	1,797	-	36	1,420	1,312	-	108
62	2,122	2,150	28	-	1,699	1,623	-	76
63	2,332	2,244	-	88	1,725	1,734	-	1
64	2,325	2,259	-	73	1,937	1,813	-	124
65	2,688	2,845	157	-	2,103	2,254	151	-
66	2,358	2,357	-	1	1,838	1,862	24	-
67	2,543	2,448	-	95	2,079	1,915	-	161
68	2,767	2,779	3	-	2,280	2,284	6	-
69	2,747	2,577	-	170	2,167	2,068	-	99
70	3,118	3,361	243	-	2,511	2,883	372	-

II.—COMPARISON OF ACTUAL DEATHS, CANADA, 1930-32 AND EXPECTED DEATHS
BY CANADIAN LIFE TABLE No. 1, (A) MALES, (B) FEMALES—Con.

Age	(A) Males				(B) Females			
	(1) Actual	(2) Expected	(3) Actual-Expected		(4) Actual	(5) Expected	(6) Actual-Expected	
			-	+			-	+
71.....	2,758	2,623	-	135	2,223	2,064	-	159
72.....	3,211	3,146	-	65	2,046	2,592	-	54
73.....	3,034	2,893	-	141	2,569	2,441	-	128
74.....	2,981	2,946	-	35	2,565	2,455	-	110
75.....	3,003	3,145	142	-	2,665	2,800	135	-
76.....	2,958	2,950	-	8	2,616	2,572	-	44
77.....	2,609	2,531	-	78	2,309	2,214	-	95
78.....	2,663	2,719	66	-	2,473	2,510	37	-
79.....	2,520	2,303	-	217	2,230	2,072	-	158
80.....	2,490	2,572	82	-	2,346	2,593	147	-
81.....	1,993	2,013	20	-	1,977	1,835	-	142
82.....	2,077	2,096	19	-	1,994	2,007	13	-
83.....	1,910	1,793	-	117	1,940	1,865	-	75
84.....	1,730	1,707	-	23	1,852	1,772	-	80
85.....	1,477	1,485	8	-	1,612	1,627	15	-
Total.....			1,876	2,287			2,273	2,794
Total of absolute values.....			4,163				5,067	
Net total.....			+411				+521	

III.—THIRD DIFFERENCES OF RATES OF MORTALITY (q_x) OF CANADIAN LIFE TABLE No. 1

$10^{10} q_x$

Age	(A) Males		(B) Females		Age	(A) Males		(B) Females	
	-	+	-	+		-	+	-	+
12.....	4	-	2	-	52.....	-	2	-	-
13.....	4	-	2	-	53.....	-	2	-	-
14.....	4	-	2	-	54.....	-	2	-	-
15.....	-	1	-	1	55.....	5	-	4	-
16.....	-	3	-	2	56.....	2	-	-	6
17.....	1	-	1	-	57.....	-	7	-	6
18.....	1	-	1	-	58.....	-	7	-	6
19.....	1	-	1	-	59.....	-	7	-	6
20.....	1	-	-	-	60.....	3	-	4	-
21.....	-	1	-	1	61.....	5	-	4	-
22.....	-	2	-	-	62.....	-	4	-	6
23.....	-	2	-	-	63.....	-	4	-	6
24.....	-	2	-	-	64.....	-	4	-	0
25.....	1	-	1	-	65.....	10	-	12	-
26.....	1	-	-	-	66.....	3	-	4	-
27.....	-	2	-	2	67.....	-	15	-	19
28.....	-	2	-	2	68.....	-	15	-	19
29.....	-	2	-	2	69.....	-	15	-	19
30.....	-	1	-	1	70.....	-	-	-	4
31.....	1	-	1	-	71.....	10	-	12	-
32.....	1	-	1	-	72.....	-	-	6	-
33.....	1	-	1	-	73.....	-	-	6	-
34.....	1	-	1	-	74.....	-	-	6	-
35.....	1	-	1	-	75.....	5	-	2	-
36.....	-	1	-	1	76.....	-	-	-	4
37.....	-	1	-	2	77.....	-	7	-	3
38.....	-	1	-	2	78.....	-	7	-	3
39.....	-	1	-	2	79.....	-	7	-	3
40.....	2	-	-	-	80.....	6	-	3	-
41.....	1	-	1	-	81.....	5	-	2	-
42.....	-	3	-	1	82.....	-	9	-	4
43.....	-	3	-	1	83.....	-	9	-	4
44.....	-	3	-	1	84.....	-	9	-	4
45.....	-	-	2	-	85.....	-	-	-	-
46.....	2	-	1	-	Total.....	87	163	86	149
47.....	1	-	-	2	Total of absolute values..	250		235	
48.....	1	-	-	2	Net total.....	+76		+63	
49.....	1	-	-	2					
50.....	2	-	-	-					
51.....	-	-	2	-					

COMPARISONS BASED ON THE TABLES

Each of the tables here presented has been calculated for both sexes separately. In addition to making possible a comparison of rates of mortality between the sexes, the tables facilitate three more comparisons: (i) between 1921 and 1931, (ii) among the various regional divisions of Canada, (iii) between Canada's population and that of other countries, particularly England and Wales and the United States. For each of these four types of comparison, the more important figures have been charted.

SEX DIFFERENCES IN MORTALITY

The enormously more favourable mortality of female infants in the period following birth persists through the ages from 5 to about 12 in Canadian Life Table No. 1 (see Chart 1); by this latter age, however, the difference has become very small and remains small until the age of 23, the first age of life at which females show a higher mortality than males. The differential grows to an amount of about .0005 (i.e., from 10 to 15 p.c.) and remains thus for a few years; at the age of 38 it begins to diminish and reverses in sign between the ages of 42 and 43. From this stage to the end of life female mortality is lower than male by an amount which is increasing on an absolute scale but, towards the higher ages, becoming less when considered as a fraction of total mortality.

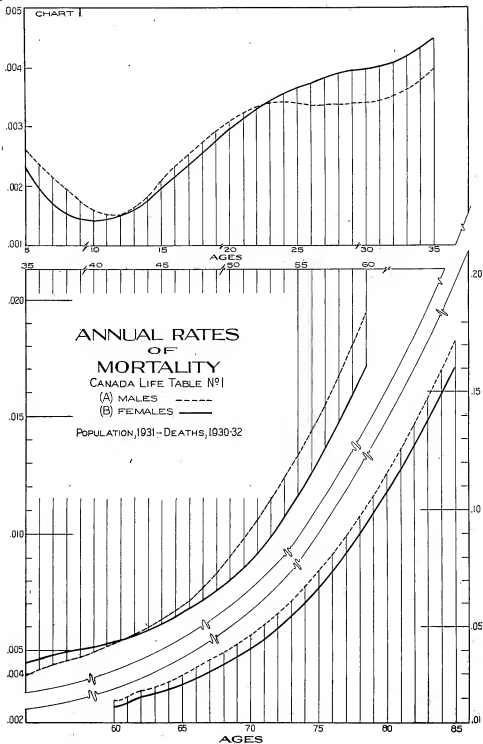
The interpretation of the curves follows readily from our knowledge of the main causes of mortality in the two sexes. Important among these, affecting the sexes differently, is the risk of death through childbirth. This in large part accounts for the high female mortality between the ages of 23 and 42. During other periods of life it is reasonable to suppose a higher mortality for the male, menaced as he is by a greater risk of accident as a result of his (usually) more active pursuits both in the earning of a livelihood (occupational diseases, etc.) and in diversion.

The table for the deaths and population of 1931 (Chart 2) for the Registration Area of 1921, which consists of all the provinces of the Dominion except Quebec, shows a similar but not identical relation between the curves for the two sexes. About the age of 21, the female curve, after running since the beginning of life considerably below the male line, comes up very close to it; but instead of crossing at this point, as it does in the Canada table, it remains below but within .0001 until the age of 31. At this age female mortality becomes greater and so remains until the age of 40 when the curves cross again and continue in the same manner as Canadian Life Table No. 1. The table for the Registration Area is made up on the basis of deaths in 1931 only, while Canadian Life Table No. 1 takes account of the deaths of the three-year period 1930-32, but the comparison which is made on page 12 shows that the deaths for the three-year period for the Registration Area give almost exactly the same rates of mortality as those for the one-year period. Thus the only way of accounting for the different ages at which the excess of female deaths due to maternity risks occurs is by an investigation of the province of Quebec. Here we find that the early superiority of the females in mortality only lasts until age 11; from this point onwards, at first slowly (only reaching a difference of .00028 by age 20) and then more rapidly, female mortality diverges from male, reaching a maximum excess of .00144 at age 29. It is not until age 47 that this excess disappears; from that age the probability of dying for males runs far ahead. Statement IV, below, summarizes the facts given above and makes similar observations for the other regional divisions of Canada, as well as for the Registration Area of 1921.

IV.—AGES AT WHICH FEMALE MORTALITY IS HEAVIER THAN MALE

Base	Area	Earliest Age at Which Female Mortality Rises above Male	Greatest Difference between Sexes		2nd Point of Crossing of Male and Female Curves
			Age of Occurrence	Amount	
1930-32 Deaths....	Canada.....	23	31	-00068	42
	Maritime Provinces.....	20	28	-00074	47
	Quebec.....	11	29	-00144	48
	Ontario.....	32	36	-00013	38
	Prairie Provinces.....	24	32	-00074	44
	British Columbia.....	11	12	-00030	15
1921 Deaths.....	Registration Area of 1921.....	23	36	-00095	44
1931 Deaths.....	Registration Area of 1921.....	30	36	-00037	

Qx



However far back we go in the examination of the general mortality of England and Wales we can find no cases of this higher mortality for females than for males between the ages of 25 and 40 which practically all the tables we have constructed for Canada show. But the detailed English tables throw considerable light on the reasons for this differential. We note from the excerpts from those tables which are published in Statement V below that in 1931 Greater London conspicuously fails to show this differential—much more conspicuously than the whole of England, where the difference between females and males decreases quite definitely during the age period under discussion. Comparing the two counties exhibiting the highest and lowest death rates respectively: in the Northumberland and Durham County Boroughs, where there has been continual blight and economic depression since the War, the general rates are exceedingly high (nearly twice as high as those for Canada) and there is an excess throughout of male over female mortality; on the other hand in the East Region rural districts (whose rates are the lowest in England and come very near to those of Canada) the differential between male and female mortality is greatly in favour of males from the ages of about 25 to 40. The conclusion is inescapable. The relatively prosperous rural district of the East Region shows a distinct parallelism to Canada in this important differentiation of mortality between the sexes. For the year 1911 the English Life Tables included a table of rural as against urban mortality for each sex. There we find for both the rural and urban populations an excess of male mortality at almost all ages. In the case of the rural population, however, the differential is very much less than it is in the case of the urban, as the figures quoted below show. Since the census-defined "rural population" for England is only very roughly rural (very little of it being rural in the Canadian sense) we could hardly expect more than this general tendency to appear.

In the 1921 England and Wales table for the Central Counties, urban, as against the table for the Central Counties, rural, we can see that the female excess exists for the rural population from under age 15 to over age 30.

V.—COMPARISONS OF MALE AND FEMALE MORTALITY FOR VARIOUS DIVISIONS OF ENGLAND AND WALES
10⁰⁰z

Age	1931											
	English Life Table No. 10			Greater London			Northumberland and Durham			East Region Rural Districts		
	(1) Males	(2) Fe- males	(3) Col.(2) - Col. (1)	(4) Males	(5) Fe- males	(6) Col.(5) - Col. (4)	(7) Males	(8) Fe- males	(9) Col.(8) - Col. (7)	(10) Males	(11) Fe- males	(12) Col.(11) - Col.(10)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
10.....	146	134	- 12	130	122	- 8	206	210	4	124	97	- 27
15.....	197	191	- 6	188	164	- 24	276	299	23	155	186	31
20.....	316	298	- 18	288	235	- 53	457	383	- 74	283	255	- 28
25.....	330	298	- 32	301	200	- 101	476	414	- 62	290	296	6
30.....	340	319	- 21	324	281	- 43	480	415	- 65	270	329	59
35.....	421	364	- 57	394	314	- 80	560	454	- 106	310	340	30
40.....	502	440	- 62	431	395	- 36	756	572	- 184	395	397	2
45.....	799	584	- 215	791	535	- 256	1020	709	- 311	545	521	- 24
50.....	1128	816	- 312	1158	762	- 396	1360	932	- 428	718	757	39
55.....	1614	1174	- 440	1689	1109	- 580	1783	1303	- 480	1042	1005	- 37

Age	1921											
	Central Counties Urban			Central Counties Rural			Urban Districts			Rural Districts		
	(1) Males	(2) Fe- males	(3) Col.(2) - Col. (1)	(4) Males	(5) Fe- males	(6) Col.(5) - Col. (4)	(7) Males	(8) Fe- males	(9) Col.(8) - Col. (7)	(10) Males	(11) Fe- males	(12) Col.(11) - Col.(10)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
10.....	159	154	- 5	151	146	- 5	-	-	-	-	-	-
15.....	195	217	22	176	210	34	259	241	- 18	216	233	17
20.....	314	298	- 16	285	308	23	340	287	- 53	311	308	- 3
25.....	382	345	- 37	346	390	44	385	328	- 57	372	355	- 17
30.....	404	368	- 36	351	360	9	441	388	- 53	428	416	- 12
35.....	486	421	- 65	407	405	- 2	563	487	- 76	497	494	- 3
40.....	590	462	- 128	514	475	- 39	724	607	- 117	618	551	- 67
45.....	756	608	- 148	627	568	- 59	979	809	- 170	787	669	- 118
50.....	1,032	840	- 192	847	756	- 91	1,404	1,087	- 317	1,048	894	- 154
55.....	1,576	1,178	- 398	1,237	1,043	- 194	2,004	1,541	- 463	1,500	1,313	- 187

Investigating this phenomenon in the United States we consider the tables below of rural and urban, foreign and native born, White and Negro, male and female mortality; we find that the female excess tends to exist in the rural rather than in the urban, and in the foreign-rather than in the native-born populations. As between races it seems somewhat indefinite. Thus to gather up the available information—we have seen that the phenomenon seems to be characteristic of rural rather than urban, prosperous rather than depressed populations; of populations low, rather than high, in general mortality. This information we have gathered entirely from the figures of other countries. Canada, with her considerably rural, fairly prosperous, healthy, recently-arrived population, therefore, could be expected to show the female excess mortality to a very great degree and, in point of fact, does so. It is hard to show from the different incidences of the excess on the different zones of Canada that these are the attendant circumstances, because of the spread of the different types throughout the country; the fact is that each of the regional divisions is so heterogeneous that relatively delicate comparisons of this nature are not feasible.

VI.—COMPARISONS OF MALE AND FEMALE MORTALITY OF THE WHITE AND COLOURED POPULATIONS OF THE UNITED STATES, 1930

10‰

Age	Continental United States					
	White			Negro		
	(1) Males	(2) Females	(3) Col. (2) — Col. (1)	(4) Males	(5) Females	(6) Col. (5) — Col. (4)
10.....	147	113	— 34	211	161	— 50
15.....	213	104	— 49	433	512	70
20.....	318	277	— 41	858	882	24
25.....	371	339	— 32	1,000	1,034	— 62
30.....	413	374	— 39	1,275	1,150	— 116
35.....	510	433	— 77	1,484	1,322	— 162
40.....	679	532	— 147	1,813	1,625	— 188
45.....	929	702	— 227	2,240	2,018	— 222
50.....	1,278	959	— 319	2,750	2,665	— 85
55.....	1,819	1,375	— 444	3,392	3,499	107

VII.—COMPARISONS OF MALE AND FEMALE MORTALITY OF THE NATIVE AND FOREIGN-BORN WHITE POPULATION OF THE ORIGINAL REGISTRATION AREA OF THE UNITED STATES, 1910

Age	Urban			Rural		
	(1) Males	(2) Females	(3) Col. (2) — Col. (1)	(4) Males	(5) Females	(6) Col. (5) — Col. (4)
10.....	259	223	— 36	207	180	— 27
15.....	293	270	— 23	269	257	— 12
20.....	493	410	— 83	483	441	— 42
25.....	573	522	— 51	513	522	9
30.....	722	633	— 89	539	546	— 7
35.....	973	767	— 206	630	611	— 19
40.....	1210	853	— 357	706	665	— 41
45.....	1518	1120	— 398	857	782	— 85
50.....	1917	1444	— 473	1065	991	— 74
55.....	2693	2098	— 595	1537	1408	— 129

	Native			Foreign born		
	(1) Males	(2) Females	(3) Col. (2) — Col. (1)	(4) Males	(5) Females	(6) Col. (5) — Col. (4)
10.....	237	206	— 31	247	200	— 38
15.....	282	264	— 18	289	267	— 22
20.....	482	440	— 42	510	365	— 145
25.....	583	543	— 40	506	479	— 27
30.....	714	613	— 101	580	584	4
35.....	878	700	— 178	810	730	— 71
40.....	1002	776	— 226	1053	855	— 198
45.....	1168	923	— 235	1401	1090	— 311
50.....	1417	1168	— 249	1792	1442	— 350
55.....	1947	1620	— 327	2640	2144	— 396

SECULAR TREND IN MORTALITY

It is unfortunate that we in Canada can not, like the English, make comparisons on the basis of an unbroken line of life tables extending back to 1841. The only time comparison that we can make is with 1921 and the decade 1921-31.

There has been in the Registration Area of Canada, as in other countries, an almost continuous improvement not only in the crude rates of mortality which dropped from 10.6 in 1921 to 9.4 in 1931, but also in the standardized rates. The naive observer might expect that this falling death rate extends to the whole period of life; he reasons that the improvements in sanitation and medical science that have come with increasing wealth and civilization and with the pushing back of the frontier would extend to all ages equally. This is not the case. If we consider the rates among males in the Registration Area for 1921 and 1931 we can see (Chart 2) that there is a difference between 1921 and 1931 of .00157 at the youngest age of the table, age 5, and that this difference decreases for a few years and then remains nearly constant until the age of 27 where it is .00070. Here the difference takes a sudden dip down to .00029 at age 32, rises again slightly and finally disappears, for most practical purposes, from age 50 to the end of life. Hence, aside from the infantile ages (0-5) which will form the subject of a separate investigation, the greatest improvements are to be observed in the twenty-year period from 5 to 25. It is in this range that the influences of civilization and the achievements of medical science have had the most noticeable effect.

The case for the female population and deaths of 1921 against those of 1931 is analogous but with one important element of difference. Here the original difference of .00152 at age 5 decreases to a minimum at age 12 of .00059 and then begins to increase gently, being of the amount of .00094 at age 30. It comes slowly to a maximum of .00128 at 42. It continues great until the age of about 55 when it begins to disappear, and from age 60 onwards there is little to choose between the two life tables. It is to be noted that the gap between female mortality from ages 30 to 45 of 1921 and 1931 is very much greater than between male mortality in the two years in the same age intervals. In the comparison for females we can detect the same influences we noted in the male table, with the addition, perhaps due to more easily available medical care in child bearing, of a greater improvement in the rates of mortality for females between 30 and 45 than is to be found in any other sex-age group outside of the ages 0-10.

The single-census method of constructing a mortality table from census data and death records has for some decades been considered superior to the two-census method. Chief fault of the two-census procedure, particularly when, as in Canada, the population is rapidly changing not only in total numbers but in age constitution, is the difficulty of obtaining the mean of the exposed. The most practicable method is the very simple one of using the average of the figures for the terminal points (that is the average of the two censuses).

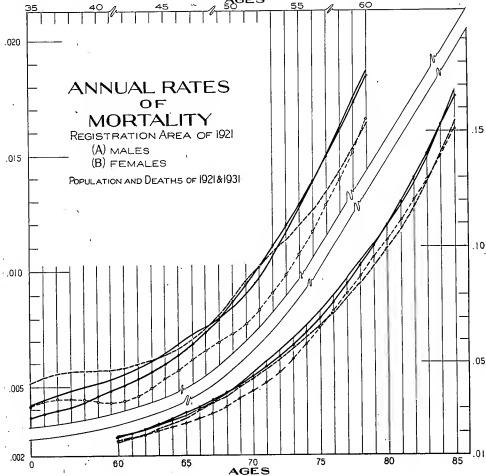
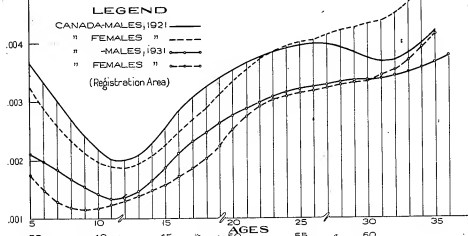
Using, therefore, the 1921 and 1931 Censuses, and the deaths recorded for the Registration Area for the interval 1922-30 and half the deaths of the years 1921 and 1931, we obtain the pivotal rates of mortality for the two sexes shown in Statement VIII. The pivotal values from the deaths and populations of 1921 and 1931 are also given for comparison.

At every age up to 57 for both males and females 1921 is greater than 1921-31, which in turn is greater than 1931. In short, mortality at the ages below 57 was improving more or less continuously during the decade. For the ages of 57 and upwards, on the other hand, there seems to be in general a higher mortality for the ten-year period than for either of the two one-year periods. Between the one-year periods at these higher ages there is little choice in mortality, now one, now the other, being higher. In so far as the short period of ten years can give an indication this agrees well with the trend of English and American mortality.

Qx

.005

CHART 2



VIII.—ANNUAL RATES OF MORTALITY FOR MALES AND FEMALES FOR THE REGISTRATION AREA OF 1921, BASED ON DEATHS OF 1921, 1921-31 AND 1931
10‰.

Age	Males			Females		
	1921	1921-31	1931	1921	1921-31	1931
7	304	234	183	262	198	127
12	200	186	134	188	165	129
17	308	270	231	268	240	186
22	376	334	298	372	336	291
27	398	348	328	414	370	324
32	371	347	343	450	410	353
37	463	437	392	554	495	447
42	554	550	508	583	552	494
47	726	714	682	708	702	616
52	972	970	1,020	1,017	914	833
57	1,509	1,520	1,495 ¹	1,341	1,356	1,279 ¹
62	2,163	2,256	2,179 ¹	1,947	2,010	1,947 ¹
67	3,286	3,649	3,412 ¹	3,278	3,204	2,860
72	5,582	5,522	5,266	5,177	4,888	4,628
77	8,677	8,920	8,378 ¹	7,838	8,119	8,054 ¹
82	12,773	13,519	13,025 ¹	11,705	12,607	12,027
87	19,408	19,861	19,147 ¹	18,252	18,773	17,332 ¹
92	24,740	28,950	27,078 ¹	25,097	26,243	23,554 ¹

¹ Census where 1921-31 does not fall between 1921 and 1931.

The observation that the secular trend in mortality is downwards only for the early ages of life, being doubtful or non-existent at older ages, has been made many times in other countries. Canada seems to follow this rule, in so far as the available information will permit us to judge. This means that we can look forward to a tendency for fewer and fewer deaths to take place in the ages 0-50, say, and an increasing proportion to take place from 50 to 80. So far, human effort has made little attack on the Biblically-assigned upper limit of life.

Mortality rates in England and Wales go back to the year 1838 and are given by age in the 1935 edition of the Registrar General's Review. An examination of the data (Statement IX below) shows that while the rate of mortality at the younger ages has decreased to about one-third of the rate of ninety years before, yet at the oldest age bracket the decrease is a mere 9 p.c. Statement X tells a similar story for the shorter record of the United States.

IX.—DEATHS PER 1,000 MALE AND FEMALE POPULATION AND IMPROVEMENT IN RATE OVER NINETY-YEAR PERIOD, ENGLAND AND WALES

Age Group	Males						Females					
	1841-45	1886-90	1931-35	1886-90 ÷ 1841-45	1931-35 ÷ 1841-45	Im- prove- ment 1843- 1933	1841-45	1886-90	1931-35	1886-90 ÷ 1841-45	1931-35 ÷ 1841-45	Im- prove- ment 1843- 1933
All ages.....	21.6	20.0	10.7	92.59	49.54	10.9	19.8	17.2	8.6	86.87	43.43	11.2
0-4.....	68.7	61.9	20.1	90.10	29.26	48.6	58.6	52.0	16.0	88.74	27.30	42.6
5-9.....	8.8	4.9	2.3	55.68	26.14	0.5	8.6	4.9	2.1	56.98	24.42	0.5
10-14.....	4.8	2.8	1.4	58.33	29.17	3.4	5.2	2.9	1.4	55.77	26.92	3.8
15-19.....	6.8	4.1	2.4	60.20	35.29	4.4	7.7	4.2	2.2	54.55	28.57	5.5
20-24.....	9.0	5.5	3.2	61.11	35.56	5.8	8.6	5.2	2.8	60.47	32.56	5.8
25-34.....	9.4	7.4	3.3	78.72	35.11	6.1	9.9	6.9	3.1	69.70	31.31	6.8
35-44.....	12.2	12.1	5.4	99.18	44.26	6.8	12.1	10.3	4.3	85.12	35.54	7.8
45-54.....	17.2	18.4	11.2	112.79	65.12	0.0	15.1	15.0	7.9	99.34	53.32	7.2
55-64.....	30.3	35.2	25.5	116.17	77.56	6.8	27.2	28.8	16.9	105.88	62.13	10.3
65-74.....	65.6	72.1	56.8	110.08	86.72	8.7	59.1	61.7	43.0	104.40	72.76	16.1
75-84.....	143.7	147.9	135.2	102.92	94.08	8.5	131.8	132.3	109.7	100.38	83.23	22.1
85 and over.....	305.1	313.7	278.8	102.82	91.38	20.3	288.6	276.1	247.6	95.67	85.79	51.0

X—DEATHS PER 1,000 MALE AND FEMALE POPULATION AND IMPROVEMENT IN RATE OVER THIRTY-YEAR PERIOD, FOR THE ORIGINAL REGISTRATION AREA OF THE UNITED STATES

Age	Males			Females		
	1900-02	1929-31	Improvement 1901-30	1900-02	1929-31	Improvement 1901-30
7	4.20	2.08	2.12	3.91	1.69	2.22
12	2.59	1.58	1.01	2.43	1.19	1.24
17	4.25	2.55	1.70	4.27	2.01	2.26
22	0.68	3.28	3.40	6.19	3.09	3.10
27	7.35	3.47	3.88	7.15	3.22	3.93
32	8.48	4.21	4.27	8.65	3.81	4.24
37	9.85	5.63	4.22	8.68	4.59	4.18
42	11.24	8.04	3.20	9.76	6.03	3.73
47	13.72	11.21	2.51	11.56	8.47	3.09
52	17.06	16.14	0.92	15.03	12.07	2.96
57	24.20	23.25	0.95	21.31	17.74	3.57
62	32.76	33.65	-0.92	28.05	27.07	1.58
67	48.21	48.28	-0.07	42.52	40.46	2.06
72	68.61	71.00	-2.39	63.04	61.35	1.60
77	104.41	105.26	-0.85	94.87	94.14	0.73
82	155.42	154.87	0.55	141.16	140.78	0.38
87	218.59	213.05	4.64	200.26	197.96	2.36

The absolute figures have been given above, since the comparison is intended to be made between the three countries at a given age, i.e., horizontally on the tables presented. For a vertical comparison it would be necessary to reduce the amounts of difference given to ratios of the actual mortality at the various ages since it is age-by-age percentage improvement that is significant. The figures for the Registration Area of 1921 on this basis are shown below.

XI—PERCENTAGE DECREASE OF MORTALITY OF THE MALE AND FEMALE POPULATION, FROM 1921 TO 1931 AT QUINQUENNIAL AGES, REGISTRATION AREA OF 1921

Age	Males	Females	Age	Males	Females
5	42.78	46.77	55	- 0.94	9.82
10	36.07	41.21	60	- 0.64	- 0.73
15	27.24	30.84	65	- 4.21	9.20
20	22.63	24.65	70	- 3.36	13.28
25	18.99	21.45	75	- 5.06	1.10
30	10.40	21.81	80	- 0.78	- 4.10
35	12.88	19.46	85	- 1.37	- 2.3
40	11.33	24.30	90	- 4.10	7.06
45	7.72	17.03	95	-17.44	7.41
50	- 2.12	17.55			

The chance of a male born alive living to age 70 by English Life Table No. 10 (1930-32) is as good as his chance of reaching age 55 by English Life Table No. 4 (1871-80). The chance of reaching age 55 by English Life Table No. 10 is as good as the chance of reaching age 13 by English Life Table No. 4.

Below are the actual amounts of improvement, expressed as the difference in the probabilities of dying in a year between 1921 and 1931 for Canada, England and Wales and the United States. It is apparent that the improvements for the single decade spread themselves rather regularly over the various age groups for the three countries.

XII—IMPROVEMENTS IN MALE AND FEMALE MORTALITY IN DECADE 1921-31 FOR THREE COUNTRIES, CANADA, ENGLAND AND WALES AND THE UNITED STATES

Age	Males			Females		
	Canada ¹ 1921-31	England and Wales 1921-31	United States ² 1920-30	Canada ¹ 1921-31	England and Wales 1921-31	United States ² 1920-30
10	-00079	-00035	-00094	-00082	-00046	-00067
20	-00078	-00033	-00114	-00082	-00038	-00161
30	-00039	-00094	-00168	-00094	-00073	-00235
40	-00058	-00126	-00065	-00138	-00092	-00148
50	-00018	-00051	-00129	-00155	-00099	-00094
60	-00012	-00146	-00239	-00012	-00127	-00067
70	-00153	-00038	-00386	-00576	-00195	-00106
80	-00083	-00498	-01002	-00412	-00092	-00392

¹ Registration Area of 1921.

² Registration Area of 1920.

MORTALITY IN THE REGIONAL DIVISIONS OF CANADA

A very small amount of investigation shows that mortality differentials between the various regional divisions of Canada vary greatly from age to age. The spread for males between the zones decreases from age 5 (see Chart 3) to a minimum that coincides with the minimum in mortality, i.e., at about age 12 or 13. After these ages there is a branching out again, the most striking feature of which is the enormous difference between the Maritimes and the Prairie Provinces. At age 27, where this difference reaches a maximum, the mortality for the Maritime males is .00429 and for Prairie males is .00269, the difference being .00160. This difference persists almost constant in amount until the age of 50 or 55 is reached, at which time the gap begins to close up, and from about 60 onwards the Maritimes and Prairies more or less oscillate about one another, no significant differences being noticeable.

On the basis of the method and results of Mr. M. C. MacLean's work* on the description of population, these facts have a great deal of meaning. The general subject of Mr. MacLean's work is the way in which age structure in any population group is the reflection of the history of that group. And perhaps the most important constituent of the history of a country whose growth has been as rapid as that of Canada is immigration.

An immigrant population is rather healthier than a population that stays at home, for there is a kind of self-selection of immigrants by which only the fittest ever get to Canada, over and above whatever selection is carried out by the Department of Immigration. If this consideration applies to an individual immigrant it applies to any group tending to be dominated by immigrants; in particular it applies to age-sex groups. Mr. MacLean's work on the age structure of the immigrant population† has made it clear that that population is essentially middle-aged in character, and that those counties of Canada that have absorbed large numbers of immigrants tend also to be those that have the highest proportion of their population between the ages of 25 and 64. If the same is true of regional divisions of Canada, then those provinces that have a large immigrant population will have lower mortality considered relatively to provinces of largely native constitution, at the middle ages at which the immigrants predominate, than at the older and younger ages at which there are relatively few immigrants.

In other words, on the theory that it is the type of population (such type being determined by population structure, racial origin and other features, underlying which are the factors of self-selection of that population through immigration) that largely determines death rates, the divergence between the different regions in respect of mortality should be greatest at the ages where immigration takes place. At the very young ages and at the very old ones, the Maritimes, which are the oldest part of Canada (the word "oldest" being here used in the special sense of oldest in respect of immigration history, a somewhat technical sense developed at length in the monograph on Ages by Mr. M. C. MacLean), will be very similar to the Prairies, the "newest" part of Canada; for in the old population, selection has worn off—to use the life assurance phrase—i.e., the initially healthy group has weakened until the average health of its constituents is no better than that of the population as a whole and the young population is largely native-born, and therefore tends to native mortality. The immigrant population is predominantly in the middle-age groups and it is in these ages that the greatest differences would exist between provinces in mortality. To measure the difference between regions we have calculated the coefficient of variation at different ages. As shown below, these coefficients rise to a maximum at about age 30 for males and then decrease towards the older ages.

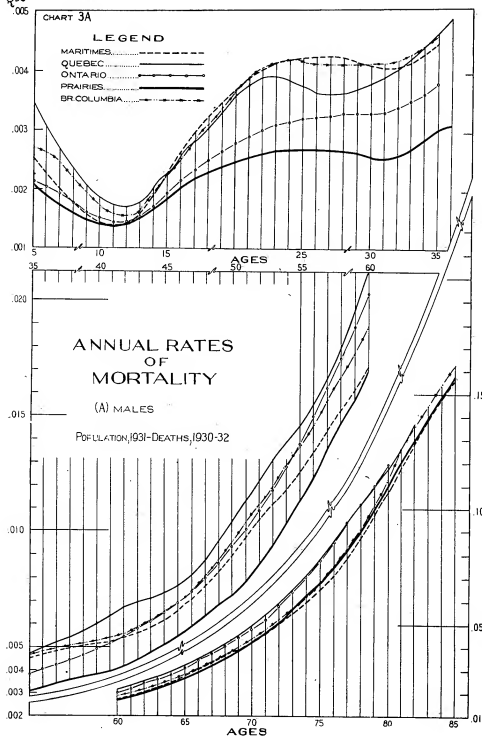
XIII.—COEFFICIENT OF VARIATION OF DEATH RATE IN THE FIVE REGIONAL DIVISIONS OF CANADA AT DECENNIAL AGES

Age	Males	Females	Age	Males	Females
10.....	.1115	.1951	50.....	.1162	.1170
20.....	.1582	.2187	60.....	.0912	.1009
30.....	.1679	.2108	70.....	.0821	.0828
40.....	.1430	.1782	80.....	.0423	.0913

*See 1931 Census Monograph *Population Growth* by M. C. MacLean, also 1931 Census, Vol. I, Chap. I.

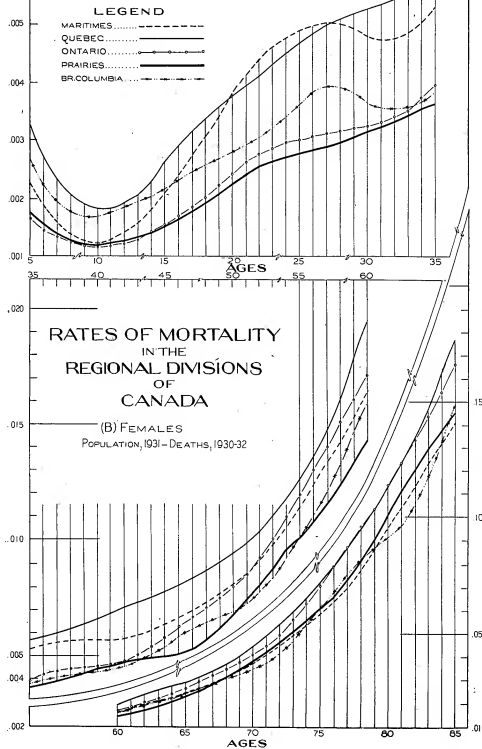
†See 1931 Census Monograph *The Age Distribution of the Canadian People* by M. C. MacLean.

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CHART 3B



By a coincidence which can hardly be the result of pure chance the immigrant population is most important about age 30. The statement below shows the percentage in each quinquennial age group who are foreign-born; the non-British-born populations being taken as a sample of the mobile group. This applies, of course, to persons who arrived in Canada at all periods. A steady rise up to the 35-39 groups is observed, after which there is a steady fall until age 90.

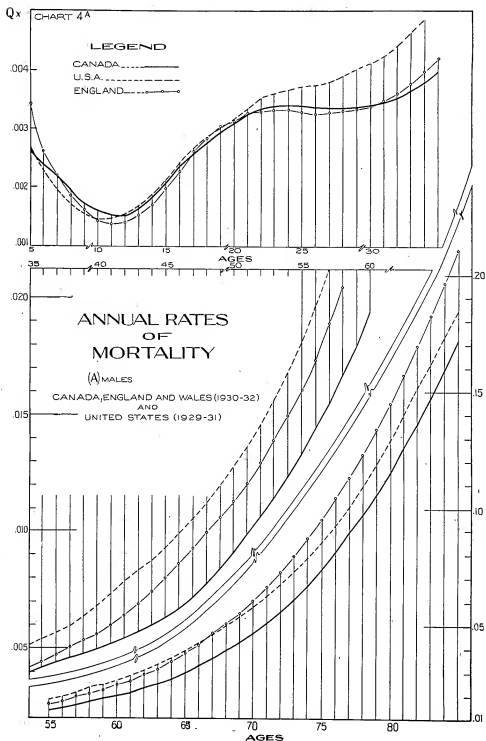
XIV.—PERCENTAGE OF TOTAL POPULATION IN EACH AGE GROUP OF NON-BRITISH BIRTH, CANADA, 1931

Age Group	P.C.	Age Group	P.C.
All ages.....	10.82	55-59.....	14.27
0-4.....	1.62	60-64.....	12.42
5-9.....	3.01	65-69.....	11.23
10-14.....	3.08	70-74.....	10.16
15-19.....	4.54	75-79.....	9.24
20-24.....	11.09	80-84.....	7.62
25-29.....	17.96	85-89.....	7.56
30-34.....	20.12	90-94.....	7.10
35-39.....	20.64	95-99.....	9.13
40-44.....	19.64	100 and over.....	15.34
45-49.....	18.20	Not stated.....	11.96
50-54.....	15.58		

The modal year-group of immigration of the non-British-born population is 1926-30, but a large part of the immigrants arrived before 1920. We can obtain a more refined measure of the age characteristics of the mobile elements by directly finding the percentage of the total population in any age group who entered this country in the five-year period 1926-30. Below are the figures for males and females separately. It will be seen that the proportion of immigrants reaches its peak in the age group 25-29. The number of female immigrants is rather smaller than that of males, but the same conclusion is indicated.

XV.—IMMIGRANTS ARRIVING IN 1926-30 AS PERCENTAGE OF POPULATION IN QUINQUENNIAL AGE GROUPS, BY SEX, CANADA, 1931

Age Group	Males			Females		
	Total	Immigrants 1926-30	Immigrants 1926-30 as Percentage of 1931 Population	Total	Immigrants 1926-30	Immigrants 1926-30 as Percentage of 1931 Population
0-4.....	543,172	10,571	1.95	531,243	10,171	1.91
5-9.....	572,507	23,274	4.07	560,242	21,996	3.93
10-14.....	542,930	14,300	2.63	531,121	13,023	2.45
15-19.....	525,250	20,514	3.91	514,341	14,587	2.84
20-24.....	463,722	39,275	8.47	447,463	30,425	6.80
25-29.....	409,976	56,348	14.48	376,305	31,868	8.47
30-34.....	368,135	45,347	12.32	340,701	23,347	6.85
35-39.....	359,081	25,283	7.07	329,382	14,994	4.55
40-44.....	347,703	14,558	4.19	298,338	9,167	3.07
45-49.....	321,513	8,973	2.79	263,698	6,067	2.30
50-54.....	267,332	4,946	1.85	221,349	4,152	1.88
55-59.....	199,160	2,645	1.33	167,865	2,506	1.49
60-64.....	156,012	1,551	0.99	137,685	1,672	1.21
65-69.....	120,093	948	0.79	110,439	1,154	1.04
70-74.....	88,581	553	0.62	83,019	648	0.78
75-79.....	50,017	237	0.47	48,612	288	0.59
80-84.....	23,877	88	0.41	25,294	118	0.47
85-89.....	8,065	36	0.42	10,464	50	0.48
90-94.....	2,051	3	0.15	2,881	5	0.17
95-99.....	417	1	0.24	656	3	0.46



MORTALITY OF OTHER COUNTRIES

Comparing the probabilities of dying for males of Canada, England and the United States, we see (in Chart 4) that except at 8, 9, 10 and 11 there is no point between ages 5 and 90 where Canada is not below at least one of the other two countries; between 17 and 21 and from 31 through to 90 she is below both of them.

The charts bring out the fact that the relative spread between the three curves is greatest about the middle and older ages of life, being very small at the young ages; also that the differences are less for females than for males.

The superiority of Canada's mortality appears likewise in a comparison of figures about the year 1921. From the statement below (Statement XVI) we can see that there are few ages at which Canada is not superior to England and Wales and to the United States.

But Canada's continued lighter mortality is, in all likelihood, due only in part to healthier climate and manner of living, superior medical and sanitation facilities. It is due much more to the selection of the personnel of the population through immigration, which was spoken of previously as a principal cause of the differences between Canada's regional divisions. The United States is "older" than Canada so the selection of its population through immigration has worn off to some extent—hence its higher mortality.

XVI.—COMPARISON OF MALE AND FEMALE LIFE TABLES FOR THE REGISTRATION AREA OF CANADA, 1921 WITH OFFICIAL TABLES OF ENGLAND, 1921 AND THE UNITED STATES, 1920

Age	Males			Females		
	Canadian Life Table 1921 ¹	English Life Table No. 9 ²	United States Life Table 1920 ³	Canadian Life Table 1921 ¹	English Life Table No. 9 ²	United States Life Table 1920 ³
5.....	-00367	-00417	-00395	-00325	-00424	-00349
10.....	-00219	-00181	-00211	-00199	-00180	-00179
15.....	-00257	-00218	-00291	-00227	-00227	-00249
20.....	-00354	-00349	-00427	-00334	-00300	-00433
25.....	-00395	-00398	-00504	-00401	-00350	-00532
30.....	-00375	-00434	-00573	-00431	-00392	-00603
35.....	-00420	-00553	-00669	-00514	-00451	-00642
40.....	-00512	-00688	-00750	-00598	-00532	-00676
45.....	-00648	-00881	-00926	-00640	-00658	-00814
50.....	-00849	-01179	-01174	-00883	-00915	-01067
55.....	-01272	-01755	-01653	-01191	-01319	-01463
60.....	-01862	-02561	-02482	-01639	-01897	-02173
65.....	-02730	-03975	-03499	-02670	-02992	-03168
70.....	-04550	-05997	-05463	-04336	-04646	-05023
75.....	-07329	-09379	-08191	-06651	-07594	-07597
80.....	-10121	-14002	-11973	-09908	-11765	-11341
85.....	-16726	-19974	-18232	-15440	-17465	-17044
90.....	-22800	-26752	-23819	-22626	-23852	-23061

¹ Based on deaths of 1921 only for the Registration Area.

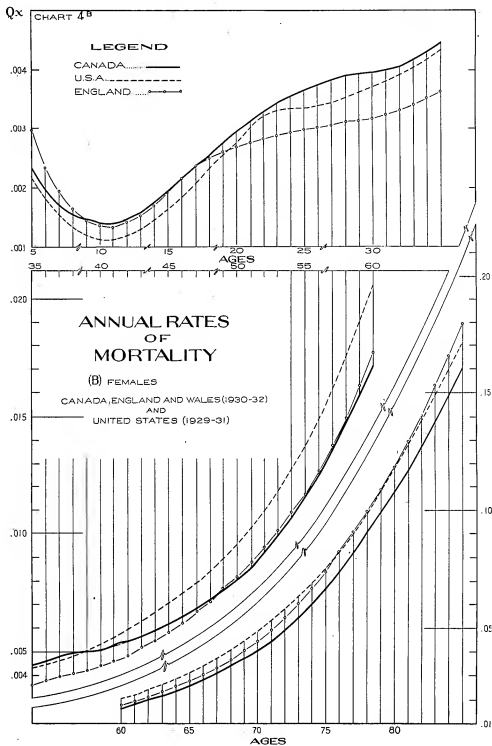
² Based on population of England and Wales, 1921 and deaths of 1920-22.

³ Based on White population of the Registration Area, 1920 and deaths of 1919-21.

The case for England and Wales as compared with Canada is less clear; perhaps some climatic or other reason has been responsible for the closeness of its mortality to that of Canada at the ages 20-35. Above the latter age the curve for Canada falls considerably below that of the Old Country.

MORTALITY BY OTHER THAN REGIONAL DIVISIONS OF CANADA

No tabulations are made in Canada of deaths by birthplace and age of decedent, or by racial origin and age, or by year of immigration and age, and hence it is impossible for us to test out explicitly the conclusions which have been drawn on the basis of differences in the death rates of the regional divisions of Canada. But there is an indirect way in which we can tell whether one section (other than regional) of the population is subject to greater mortality than another without knowing the age distribution of its dying members. The census gives, in five-year age groups, the numbers of persons of the various racial origins and birthplaces by sex and the vital statistics gives numbers of deaths by sex and birthplace and sex and racial origin, both without regard to age. Hence the procedure for comparing death rates in such a



way that we will make the (absolutely essential) allowance for age distribution in the living population, without having to calculate age-specific death rates, is to multiply the numbers given as living in a sex-age-race, say, distribution by the age-specific death rates which are obtainable for the given sex for Canada from the Census of 1931 and vital statistics for 1930-32. By adding up the expected deaths for all ages for the given section of the population we can obtain the total expected deaths on the assumption that the age-specific rates are the same as those for the whole of Canada for the sex investigated. Then we may compare this figure with the number of deaths for the aggregate (of all ages) for the particular birthplace or racial origin classification given in the vital statistics for the three-year period, and the excess or defect of this amount from the calculated will give a measure of the comparative mortality of the group in question and the general population of Canada, due regard thus having been paid to the differences in age distribution which so greatly affect liability to mortality.

Thus we can see what constituents of the population of Canada have the greatest mortality; what are the constituents of our population that have brought us to the point where we are superior to England and the United States, and what are the forces that prevent us from being quite as healthy as, say, the Scandinavian Countries. As long as the total mortality for the groups is given we can carry our investigations into any classifications whatever, without requiring deaths in that classification by age.

We have seen that the regional divisions of Canada differ greatly from one another in mortality. The reasons for this, or for the differences between provinces, can be investigated in the same manner. Do the Swedes in Saskatchewan, for example, help to keep its death rate low? To find out, all we need to do is to calculate the expected mortality of the various racial origins in Saskatchewan on the basis of the total Prairie mortality at each age and compare the totals taken for all ages for each racial origin with actual total deaths in that racial origin as given in the vital statistics.

Below are given expected deaths for certain birthplace groups, calculated on the basis of deaths in five-year age groups for males in Canada for the years 1930-32, the exposures being the population in each five-year age group of the given birthplace classification as reported in the Census of 1931. The "actual" deaths are taken from the volumes of vital statistics for 1930, 1931 and 1932.

XVII.—ACTUAL AND EXPECTED MALE DEATHS, BY BIRTHPLACE¹, CANADA, 1930-32

Birthplace	Actual	Expected	Actual - Expected
Total.....	171,791	171,791	
Canada.....	131,782	131,677	1-0054
British Isles.....	21,039	21,725	0-9684
British Possessions.....	819	749	1-0635
Europe.....	11,941	11,801	1-0034
Asia.....	1,198	1,345	0-8907
United States.....	5,012	4,994	1-0036

¹ Not stated birthplaces distributed.

The classification "Not stated" birthplace in the actual deaths was considerable (1,228 for the three years), so great, in fact, that if it contained any considerable deviation from the proportional distribution assumed, much of the comparison would be invalidated. "Other" birthplace deaths were few in number and were distributed with the "Not stated", as were deaths of residents of the Yukon and the Northwest Territories.

Notwithstanding these limitations of the table it is plain that the Canadian born in Canada are subject to higher mortality than Canadian residents as a whole and that immigrants from the British Isles and Asia are subject to lower. For the other cases, either the numbers involved are very small or the differences are negligible.

It is particularly remarkable that the British Isles should show higher mortality for males than Canada as a whole while British immigrants in Canada show lower. There could be no more convincing evidence of the action of immigrational selection.

If we take as the mobile population of a province that part which was not born in the province, we may calculate, in the same way, actual and expected mortality for the non-mobile and total populations in each case. Below are the figures for males for the five provinces whose mobile male population was 25 p.c. or more of all males at the 1931 Census. It is to be noticed that the three provinces of most recent settlement show a considerably higher actual than expected mortality for those males.

XVIII.—ACTUAL AND EXPECTED MORTALITY IN THE SEVERAL PROVINCES OF MALES LIVING IN THE PROVINCE IN WHICH THEY WERE BORN, 1931

Province	P.C. of Males Born in Province	Actual	Expected	Actual + Expected
Ontario.....	70.6	39,638	40,878	0.9697
Manitoba.....	51.3	3,140	3,208	0.9788
Saskatchewan.....	44.9	4,080	3,977	1.0259
Alberta.....	38.0	3,245	3,063	1.0594
British Columbia.....	30.7	2,370	2,248	1.0543

MOST PROBABLE LIFETIME

The number of persons dying in each year of age in the stationary population of the life table rises to a maximum, generally in the age interval 75-80, and then decreases, reaching 0 at the end of the table. For Canada and its regional divisions the maximum points occur as follows:—

XIX.—AGE AT WHICH MAXIMUM NUMBER OF DEATHS OCCURRED IN STATIONARY POPULATION AND NUMBER OF DEATHS AT THAT AGE, FOR MALES AND FEMALES, CANADA AND REGIONAL DIVISIONS, 1930-32

Regional Division	Males		Females	
	Age	Deaths	Age	Deaths
CANADA.....	77	3,112	78	3,196
Maritime Provinces.....	80	3,043	80	2,995
Quebec.....	76	2,991	78	2,941
Ontario.....	77	3,173	78	3,385
Prairie Provinces.....	79	3,297	80	3,382
British Columbia.....	79	3,046	77	3,221

In general the better the mortality at older ages, the older will be the age at which the maximum number of deaths take place. The series of English life work their way from age 71 (English Life Table No. 1 (1841)) to age 74 (English Life Table No. 10 (1931)) in somewhat irregular fashion.

XX.—AGE AT WHICH MAXIMUM NUMBER OF DEATHS OCCURRED IN STATIONARY POPULATION AND NUMBER OF DEATHS AT THAT AGE, FOR MALES AND FEMALES IN ENGLISH LIFE TABLES, NOS. 1-10, 1841-1931

Table No.	Year	Males		Females	
		Age	Deaths	Age	Deaths
1	1841.....	71	1,553	73	1,022
2	1838-1844.....	72	1,540	73	1,590
3	1835-1854.....	72	1,519	73	1,584
4	1871-1880.....	71	1,557	73	1,730
5	1881-1890.....	70	1,718	73	1,920
6	1891-1900.....	71	1,781	73	1,990
7	1901-1910.....	72	2,043	74	2,305
8	1910-1912.....	73	2,223	76	2,431
9	1920-1922.....	74	2,557	77	2,708
10	1930-1932.....	74	2,826	77	3,071

If someone were to make a wager as to the age at which a Canadian male was most likely to die, his best bet would be age 77, provided that that age had not already been reached. For a woman it would be age 78.

Comparison of the age of maximum deaths is one answer to the question "Do people live longer than they used to?" In 1841 in England the rate of mortality (standardized) was more than twice what it was in 1930, and yet the age of maximum deaths had only gone up three years. In the United States there was actually a recession in the maximum age between 1901 and 1930, from 75 down to 73. If we except tropical countries we find that there is very little choice between ages of maximum likelihood of death in different tables. The age increased three years between 1841 and 1931 in England while the expectation of life at age 0 for males rose 18.55 years, from 40.19 to 58.74. Put roughly, the conclusion is that young people live to older ages than formerly, but that older people do not tend to live to yet older ages.

An interesting observation from the series of English Life Tables is that the number of persons dying at this maximum age has steadily increased (1,543 in the stationary male population of 1841 to 2,826 in that of 1931); the deferment of deaths which, a hundred years ago, would have taken place at young or middle ages has led to a kind of "piling up" in the deaths of the stationary population in the seventies.

MAXIMA AND MINIMA ON THE q CURVES

It is noticeable that in most countries there is a drop in the rate of mortality at some point between the ages of 25 and 35. This applies to both sexes separately. Thus we have, for most of the tables here published, a second low point about age 28 before the steep climb that continues with accelerating pace to the end of life. In the tables for Canada and its divisions these age points are as follows:—

XXI.—AGES AT WHICH MAXIMA AND MINIMA OCCUR ON THE MALE AND FEMALE CURVE OF THE RATES OF MORTALITY, CANADA AND REGIONAL DIVISIONS, 1930-32

Regional Division	Males			Females		
	First Min.	Max.	Second Min.	First Min.	Max.	Second Min.
CANADA.....	11.5	24	26	10	-	-
Maritime Provinces.....	11	27	31	10	27	31.5
Quebec.....	12	23	27	10	-	-
Ontario.....	11.5	23	29	10	-	-
Prairie Provinces.....	11	26	31	10	-	-
British Columbia.....	12	24	30	9	27	32

Males reach the first minimum point about two years after females in each case. The second minimum point is plain in each of the male tables but appears only twice in the female ones, being represented in the others only by a point of inflection.

Sir Alfred Watson notes the existence of this dip in the English Life Table of 1931, and infers as we may do for Canada, that it represents a real dip in mortality.

"Another section of the table" he says, "in which the progression of the rates is somewhat irregular is between the ages of 20 and 30. The graduated rates of mortality for males show in this section a maximum value at age 23 followed by decreases to age 26, where the minimum rate of the section occurs. Thereafter the rate increases steadily from age to age. In the case of females there are no instances of decreasing rates of mortality in this span of life but there is a decided retardation in the progression of the rates. Had this feature obtained only among females there might have been an inclination to assign it to mis-statement of age, but the fact that it is more pronounced among males than among females would appear to indicate that some special factor or factors are operating at these ages to disturb the progressive increase in the rates of mortality from age to age."

This failure of the female curve to dip is at least partially to be attributed to deaths from the various types of risk associated with childbirth. In 1930, 1931 and 1932 the total from these causes was 3,801 for Canada, distributed by age as in Statement XXII.

XXII.—DEATHS IN CLASS XI—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE—AS A PERCENTAGE OF TOTAL FEMALE DEATHS, BY AGE GROUP, CANADA, 1930-32

Item	Age Group							
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Deaths in Class XI.....	2	226	648	813	832	789	420	70
Total female deaths.....	2,434	3,630	4,399	4,329	4,202	4,714	4,891	5,409
Deaths in Class XI as percentage of all female deaths.....	0.08	6.23	14.73	18.78	19.80	16.74	8.59	1.29

¹Class VIII in 1930.

At the same time it is interesting to note that the fact of unmarried females not, in general, being exposed to this risk, does not give spinsters a lighter mortality than married women, according to the English figures for 1930-32. Selection operates strongly enough in favour of the married class to overcome the extra physical risks of marriage, by a very good margin.

Sir Alfred Watson states under the heading "Conclusion" in his Introduction to the Life Tables for England and Wales for 1931: "The national tables are an aggregation of the experiences of different geographical areas, with their subdivisions, in which the rates of mortality, as between extremes, vary widely at identical ages, a feature which is also found in different divisions of the same area. These national tables constitute a valuable standard for various purposes, but they may not reflect the mortality in any particular area which has contributed to the aggregate experience upon which the tables were framed." An investigation of the tables presented in this volume tends to bring out the same fact, not only insofar as the national table is concerned, but for the regional tables as well. Canada's regional divisions, even more perhaps than those of England, contain so heterogeneous a population that, if we were to make an analysis by counties, it might easily be that a given regional division would contain no county whose mortality was represented by the table for the whole.

The fact, in short, that any life table expresses an average state of affairs indicates at once its value and its limitation. To make the best estimate of his mortality an individual would have to adjust the table to allow for his deviation from that average which an attempt has been made here to represent.

NATHAN KEYFITZ.

LIFE TABLES

TABLE 1. Canadian Life Table No. 1, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32

Age x	(A) Males						
	l_x	d_x	p_x	q_x	L_x	T_x	e_x
5.....	100,000	262	.99738	.00262	99,869	6,230,394	62.30
6.....	99,738	238	.99761	.00239	99,619	6,130,525	61.47
7.....	99,500	215	.99784	.00216	99,392	6,030,906	60.61
8.....	99,285	193	.99806	.00194	99,188	5,931,514	59.74
9.....	99,092	173	.99825	.00175	99,006	5,832,326	58.86
10.....	98,919	158	.99840	.00160	98,840	5,733,320	57.96
11.....	98,761	150	.99848	.00152	98,686	5,634,480	57.05
12.....	98,611	150	.99848	.00152	98,536	5,535,794	56.14
13.....	98,461	160	.99838	.00162	98,381	5,437,258	55.22
14.....	98,301	179	.99818	.00182	98,212	5,338,877	54.31
15.....	98,122	203	.99793	.00207	98,020	5,240,665	53.41
16.....	97,919	227	.99768	.00232	97,806	5,142,645	52.52
17.....	97,692	248	.99746	.00254	97,568	5,044,839	51.64
18.....	97,444	265	.99728	.00272	97,312	4,947,271	50.77
19.....	97,179	283	.99709	.00291	97,038	4,849,959	49.91
20.....	96,896	298	.99692	.00308	96,747	4,752,921	49.05
21.....	96,598	312	.99677	.00323	96,442	4,656,174	48.20
22.....	96,286	322	.99666	.00334	96,125	4,559,732	47.36
23.....	95,964	326	.99660	.00340	95,801	4,463,607	46.51
24.....	95,638	326	.99659	.00341	95,475	4,367,806	45.67
25.....	95,312	324	.99660	.00340	95,150	4,272,331	44.83
26.....	94,988	321	.99662	.00338	94,828	4,177,181	43.98
27.....	94,667	321	.99661	.00339	94,506	4,082,353	43.12
28.....	94,346	320	.99661	.00339	94,186	3,987,847	42.27
29.....	94,026	320	.99660	.00340	93,866	3,893,661	41.41
30.....	93,706	320	.99659	.00341	93,546	3,799,795	40.55
31.....	93,386	321	.99656	.00344	93,226	3,706,249	39.69
32.....	93,065	328	.99648	.00352	92,901	3,613,023	38.82
33.....	92,737	338	.99636	.00364	92,568	3,520,122	37.96
34.....	92,399	351	.99620	.00380	92,224	3,427,554	37.10
35.....	92,048	366	.99602	.00398	91,865	3,335,330	36.23
36.....	91,682	383	.99582	.00418	91,490	3,243,465	35.38
37.....	91,299	399	.99563	.00437	91,100	3,151,975	34.52
38.....	90,900	415	.99544	.00456	90,692	3,060,875	33.67
39.....	90,485	429	.99526	.00474	90,270	2,970,183	32.83
40.....	90,056	445	.99506	.00494	89,834	2,879,913	31.98
41.....	89,611	462	.99484	.00516	89,380	2,790,079	31.14
42.....	89,149	483	.99458	.00542	88,908	2,700,699	30.29
43.....	88,666	505	.99431	.00569	88,414	2,611,791	29.46
44.....	88,161	526	.99403	.00597	87,898	2,523,377	28.62
45.....	87,635	552	.99370	.00630	87,359	2,435,479	27.79
46.....	87,083	582	.99332	.00668	86,792	2,348,120	26.96
47.....	86,501	618	.99286	.00714	86,192	2,261,328	26.14
48.....	85,883	661	.99230	.00770	85,552	2,175,136	25.33
49.....	85,222	710	.99167	.00833	84,867	2,089,584	24.52
50.....	84,512	763	.99097	.00903	84,130	2,004,717	23.72
51.....	83,749	820	.99021	.00979	83,339	1,920,587	22.93
52.....	82,929	879	.98940	.01060	82,490	1,837,248	22.15
53.....	82,050	939	.98856	.01144	81,580	1,754,758	21.39
54.....	81,111	1,000	.98767	.01233	80,611	1,673,178	20.63

TABLE 1. Canadian Life Table No. 1, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

Age x	(A) Males						
	l_x	d_x	p_x	q_x	L_x	T_x	e_x
55.....	80,111	1,065	.98671	.01329	79,578	1,592,567	19.88
56.....	79,046	1,133	.98567	.01433	78,480	1,512,989	19.14
57.....	77,913	1,207	.98451	.01549	77,310	1,434,509	18.41
58.....	76,706	1,282	.98329	.01671	76,065	1,357,199	17.69
59.....	75,424	1,356	.98202	.01798	74,746	1,281,134	16.99
60.....	74,068	1,435	.98062	.01938	73,350	1,206,388	16.29
61.....	72,633	1,522	.97904	.02096	71,872	1,133,038	15.60
62.....	71,111	1,623	.97718	.02282	70,300	1,061,166	14.92
63.....	69,488	1,732	.97508	.02492	68,622	990,866	14.26
64.....	67,756	1,844	.97278	.02722	66,834	922,244	13.61
65.....	65,912	1,961	.97025	.02975	64,932	855,410	12.98
66.....	63,951	2,082	.96744	.03256	62,910	790,478	12.36
67.....	61,869	2,207	.96433	.03567	60,766	727,568	11.76
68.....	59,662	2,326	.96101	.03899	58,499	666,802	11.18
69.....	57,336	2,437	.95750	.04250	56,118	608,303	10.61
70.....	54,899	2,544	.95366	.04634	53,627	552,185	10.06
71.....	52,355	2,653	.94933	.05067	51,028	498,558	9.52
72.....	49,702	2,765	.94437	.05563	48,320	447,530	9.00
73.....	46,937	2,874	.93877	.06123	45,500	399,210	8.51
74.....	44,063	2,968	.93264	.06736	42,579	353,710	8.03
75.....	41,095	3,042	.92597	.07403	39,574	311,131	7.57
76.....	38,053	3,091	.91876	.08124	36,508	271,557	7.14
77.....	34,962	3,112	.91100	.08900	33,406	235,049	6.72
78.....	31,850	3,097	.90276	.09724	30,302	201,643	6.33
79.....	28,753	3,047	.89403	.10597	27,230	171,341	5.96
80.....	25,706	2,963	.88473	.11527	24,224	144,111	5.61
81.....	22,743	2,848	.87479	.12521	21,319	119,887	5.27
82.....	19,895	2,703	.86414	.13586	18,544	98,568	4.95
83.....	17,192	2,530	.85283	.14717	15,927	80,024	4.65
84.....	14,662	2,332	.84093	.15907	13,496	64,097	4.37
85.....	12,330	2,117	.82833	.17167	11,272	50,601	4.10
86.....	10,213	1,890	.81494	.18506	9,268	39,329	3.85
87.....	8,323	1,659	.80067	.19933	7,494	30,061	3.61
88.....	6,664	1,429	.78559	.21441	5,950	22,567	3.39
89.....	5,235	1,206	.76967	.23033	4,632	16,617	3.17
90.....	4,029	996	.75289	.24711	3,531	11,985	2.97
91.....	3,033	803	.73524	.26476	2,632	8,454	2.79
92.....	2,230	632	.71669	.28331	1,914	5,822	2.61
93.....	1,598	484	.69722	.30278	1,356	3,908	2.44
94.....	1,114	360	.67682	.32318	934	2,552	2.29
95.....	754	260	.65546	.34454	624	1,618	2.14
96.....	494	181	.63312	.36688	404	994	2.00
97.....	313	122	.60978	.39022	252	590	1.87
98.....	191	79	.58541	.41459	152	338	1.75
99.....	112	49	.56001	.43999	88	186	1.64
100.....	63	29	.53355	.46645	48	98	1.53
101.....	34	17	.50601	.49399	26	50	1.43
102.....	17	9	.47736	.52264	12	24	1.33
103.....	8	4	.44759	.55241	6	12	1.24
104.....	4	2	.41668	.58332	3	6	1.16
105.....	2	1	.38460	.61540	2	3	1.09
106.....	1	1	.35134	.64866	1	1	1.02

TABLE 1. Canadian Life Table No. 1, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

Age x	(B) Females						
	l_x	d_x	p_x	q_x	L_x	T_x	e_x
5.....	100,000	232	.99768	.00232	99,884	6,317,152	63.17
6.....	99,768	197	.99803	.00197	99,670	6,217,268	62.32
7.....	99,571	170	.99829	.00171	99,486	6,117,598	61.44
8.....	99,401	153	.99846	.00154	99,324	6,018,112	60.54
9.....	99,248	143	.99856	.00144	99,177	5,918,788	59.64
10.....	99,105	139	.99860	.00140	99,036	5,819,611	58.72
11.....	98,966	141	.99858	.00142	98,896	5,720,575	57.80
12.....	98,825	147	.99851	.00149	98,752	5,621,679	56.89
13.....	98,678	157	.99841	.00159	98,600	5,522,927	55.97
14.....	98,521	172	.99825	.00175	98,435	5,424,327	55.06
15.....	98,349	192	.99805	.00195	98,253	5,325,892	54.15
16.....	98,157	212	.99784	.00216	98,051	5,227,639	53.26
17.....	97,945	230	.99765	.00235	97,830	5,129,588	52.37
18.....	97,715	248	.99746	.00254	97,591	5,031,758	51.49
19.....	97,467	268	.99725	.00275	97,333	4,934,167	50.62
20.....	97,199	287	.99705	.00295	97,056	4,836,834	49.76
21.....	96,912	303	.99687	.00313	96,760	4,739,778	48.91
22.....	96,609	319	.99670	.00330	96,450	4,643,018	48.06
23.....	96,290	331	.99656	.00344	96,124	4,546,568	47.22
24.....	95,959	342	.99644	.00356	95,788	4,450,444	46.38
25.....	95,617	351	.99633	.00367	95,442	4,354,656	45.54
26.....	95,266	358	.99624	.00376	95,087	4,259,214	44.71
27.....	94,908	365	.99615	.00385	94,726	4,164,127	43.88
28.....	94,543	370	.99609	.00391	94,358	4,069,401	43.04
29.....	94,173	372	.99605	.00395	93,987	3,975,043	42.21
30.....	93,801	373	.99602	.00398	93,614	3,881,056	41.38
31.....	93,428	376	.99598	.00402	93,240	3,787,442	40.54
32.....	93,052	381	.99591	.00409	92,862	3,694,202	39.70
33.....	92,671	389	.99580	.00420	92,477	3,601,340	38.86
34.....	92,282	400	.99567	.00433	92,082	3,508,863	38.02
35.....	91,882	412	.99552	.00448	91,676	3,416,781	37.19
36.....	91,470	424	.99537	.00463	91,258	3,325,105	36.35
37.....	91,046	434	.99523	.00477	90,829	3,233,847	35.52
38.....	90,612	443	.99511	.00489	90,390	3,143,018	34.69
39.....	90,169	451	.99500	.00500	89,944	3,052,628	33.85
40.....	89,718	459	.99488	.00512	89,489	2,962,684	33.02
41.....	89,259	470	.99474	.00526	89,024	2,873,195	32.19
42.....	88,789	483	.99456	.00544	88,548	2,784,171	31.36
43.....	88,306	499	.99435	.00565	88,057	2,695,623	30.53
44.....	87,807	516	.99412	.00588	87,549	2,607,566	29.70
45.....	87,291	537	.99385	.00615	87,022	2,520,017	28.87
46.....	86,754	560	.99355	.00645	86,474	2,432,995	28.04
47.....	86,194	586	.99320	.00680	85,901	2,346,521	27.22
48.....	85,608	615	.99282	.00718	85,300	2,260,620	26.41
49.....	84,993	645	.99241	.00759	84,670	2,175,320	25.59
50.....	84,348	678	.99196	.00804	84,009	2,090,650	24.79
51.....	83,670	717	.99143	.00857	83,312	2,006,641	23.98
52.....	82,953	763	.99080	.00920	82,572	1,923,329	23.19
53.....	82,190	815	.99008	.00992	81,783	1,840,757	22.40
54.....	81,375	873	.98927	.01073	80,939	1,758,974	21.62

TABLE 1. Canadian Life Table No. 1, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

Age x	(B) Females						
	l_x	d_x	p_x	q_x	L_x	T_x	e_x
55.....	80,502	935	·98838	·01162	80,034	1,678,035	20·84
56.....	79,567	1,002	·98741	·01259	79,066	1,598,001	20·08
57.....	78,565	1,072	·98636	·01364	78,029	1,518,935	19·33
58.....	77,493	1,143	·98525	·01475	76,922	1,440,906	18·59
59.....	76,350	1,213	·98411	·01589	75,744	1,363,984	17·86
60.....	75,137	1,288	·98286	·01714	74,493	1,288,240	17·15
61.....	73,849	1,370	·98145	·01855	73,164	1,213,747	16·44
62.....	72,479	1,462	·97983	·02017	71,748	1,140,583	15·74
63.....	71,017	1,560	·97804	·02196	70,237	1,068,835	15·05
64.....	69,457	1,660	·97610	·02390	68,627	998,598	14·38
65.....	67,797	1,765	·97397	·02603	66,914	929,971	13·72
66.....	66,032	1,877	·97158	·02842	65,094	863,057	13·07
67.....	64,155	1,998	·96886	·03114	63,156	797,963	12·44
68.....	62,157	2,117	·96594	·03406	61,099	734,807	11·82
69.....	60,040	2,230	·96286	·03714	58,925	673,708	11·22
70.....	57,810	2,345	·95943	·04057	56,638	614,783	10·63
71.....	55,465	2,470	·95547	·04453	54,230	558,145	10·06
72.....	52,995	2,607	·95080	·04920	51,692	503,915	9·51
73.....	50,388	2,753	·94536	·05464	49,012	452,223	8·97
74.....	47,635	2,892	·93929	·06071	46,189	403,211	8·46
75.....	44,743	3,013	·93265	·06735	43,236	357,022	7·98
76.....	41,730	3,109	·92550	·07450	40,176	313,786	7·52
77.....	38,621	3,171	·91789	·08211	37,036	273,610	7·08
78.....	35,450	3,196	·90984	·09016	33,852	236,574	6·67
79.....	32,254	3,183	·90133	·09867	30,662	202,722	6·29
80.....	29,071	3,131	·89231	·10769	27,506	172,060	5·92
81.....	25,940	3,041	·88275	·11725	24,420	144,554	5·57
82.....	22,899	2,916	·87264	·12736	21,441	120,134	5·25
83.....	19,983	2,758	·86200	·13800	18,604	98,693	4·94
84.....	17,225	2,569	·85085	·14915	15,940	80,089	4·65
85.....	14,656	2,358	·83914	·16086	13,477	64,149	4·38
86.....	12,298	2,130	·82684	·17316	11,233	50,672	4·12
87.....	10,168	1,892	·81390	·18610	9,222	39,439	3·88
88.....	8,276	1,652	·80035	·19965	7,450	30,217	3·65
89.....	6,624	1,416	·78619	·21381	5,916	22,767	3·44
90.....	5,208	1,191	·77140	·22860	4,612	16,851	3·24
91.....	4,017	980	·75597	·24403	3,527	12,239	3·05
92.....	3,037	790	·73990	·26010	2,642	8,712	2·87
93.....	2,247	622	·72318	·27682	1,936	6,070	2·70
94.....	1,625	478	·70579	·29421	1,386	4,134	2·54
95.....	1,147	358	·68773	·31227	968	2,748	2·40
96.....	789	261	·66899	·33101	659	1,780	2·26
97.....	528	185	·64955	·35045	436	1,121	2·12
98.....	343	127	·62942	·37058	280	685	2·00
99.....	216	85	·60858	·39142	174	405	1·88
100.....	131	54	·58701	·41299	104	231	1·77
101.....	77	34	·56472	·43528	60	127	1·67
102.....	43	20	·54170	·45830	33	67	1·57
103.....	23	11	·51792	·48208	18	34	1·48
104.....	12	6	·49339	·50661	9	16	1·39
105.....	6	3	·46810	·53190	4	7	1·30
106.....	3	2	·44203	·55797	2	3	1·21
107.....	1	1	·41517	·58483	1	1	1·10

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32

MARITIME PROVINCES

Age x	(A) Males				Age x	(A) Males			
	l_x	d_x	q_x	\bar{e}_x		l_x	d_x	q_x	\bar{e}_x
5.....	100,000	252	0.00252	62.42	55.....	79,091	994	0.01257	20.69
6.....	99,748	227	0.00228	61.57	56.....	78,097	1,043	0.01336	19.95
7.....	99,521	202	0.00203	60.71	57.....	77,054	1,100	0.01427	19.21
8.....	99,319	178	0.00179	59.83	58.....	75,954	1,155	0.01520	18.48
9.....	99,141	157	0.00158	58.94	59.....	74,799	1,207	0.01613	17.76
10.....	98,984	143	0.00144	58.03	60.....	73,592	1,264	0.01718	17.04
11.....	98,841	136	0.00138	57.12	61.....	72,328	1,337	0.01849	16.33
12.....	98,705	141	0.00143	56.19	62.....	70,991	1,434	0.02020	15.63
13.....	98,564	159	0.00161	55.27	63.....	69,557	1,556	0.02237	14.94
14.....	98,405	189	0.00192	54.36	64.....	68,001	1,694	0.02491	14.27
15.....	98,216	226	0.00230	53.47	65.....	66,307	1,838	0.02772	13.63
16.....	97,990	262	0.00267	52.59	66.....	64,469	1,979	0.03070	13.00
17.....	97,728	291	0.00298	51.73	67.....	62,490	2,108	0.03373	12.40
18.....	97,437	316	0.00324	50.88	68.....	60,382	2,215	0.03668	11.81
19.....	97,121	338	0.00348	50.04	69.....	58,167	2,305	0.03963	11.24
20.....	96,783	358	0.00370	49.22	70.....	55,862	2,389	0.04276	10.68
21.....	96,425	375	0.00389	48.40	71.....	53,473	2,475	0.04628	10.14
22.....	96,050	388	0.00404	47.59	72.....	50,998	2,569	0.05038	9.61
23.....	95,662	397	0.00415	46.78	73.....	48,429	2,657	0.05487	9.09
24.....	95,265	402	0.00422	45.97	74.....	45,772	2,729	0.05963	8.59
25.....	94,863	404	0.00426	45.16	75.....	43,043	2,794	0.06492	8.10
26.....	94,450	404	0.00428	44.35	76.....	40,249	2,858	0.07102	7.63
27.....	94,055	403	0.00429	43.54	77.....	37,391	2,923	0.07817	7.18
28.....	93,652	400	0.00427	42.73	78.....	34,468	2,989	0.08673	6.74
29.....	93,252	392	0.00420	41.91	79.....	31,479	3,038	0.09651	6.33
30.....	92,860	384	0.00414	41.08	80.....	28,441	3,043	0.10701	5.96
31.....	92,476	378	0.00409	40.25	81.....	25,398	2,990	0.11773	5.61
32.....	92,098	379	0.00411	39.41	82.....	22,408	2,872	0.12816	5.29
33.....	91,719	384	0.00419	38.58	83.....	19,536	2,692	0.13782	5.00
34.....	91,335	395	0.00432	37.74	84.....	16,844	2,477	0.14705	4.72
35.....	90,940	408	0.00449	36.90	85.....	14,367	2,249	0.15657	4.44
36.....	90,532	421	0.00465	36.06	86.....	12,118	2,025	0.16709	4.18
37.....	90,111	433	0.00480	35.23	87.....	10,093	1,810	0.17935	3.91
38.....	89,678	441	0.00492	34.39	88.....	8,283	1,597	0.19280	3.66
39.....	89,237	447	0.00501	33.56	89.....	6,686	1,388	0.20759	3.41
40.....	88,790	454	0.00511	32.73	90.....	5,298	1,186	0.22391	3.18
41.....	88,336	464	0.00525	31.89	91.....	4,112	995	0.24192	2.95
42.....	87,872	477	0.00543	31.06	92.....	3,117	816	0.26178	2.73
43.....	87,395	495	0.00566	30.23	93.....	2,301	653	0.28366	2.52
44.....	86,900	514	0.00592	29.40	94.....	1,648	507	0.30773	2.33
45.....	86,386	537	0.00622	28.57	95.....	1,141	381	0.33416	2.14
46.....	85,849	566	0.00659	27.74	96.....	760	276	0.36311	1.96
47.....	85,283	600	0.00704	26.92	97.....	484	191	0.39475	1.79
48.....	84,683	644	0.00760	26.11	98.....	293	126	0.42924	1.63
49.....	84,039	693	0.00825	25.31	99.....	167	78	0.46676	1.48
50.....	83,346	748	0.00897	24.51	100.....	89	45	0.50747	1.34
51.....	82,598	802	0.00971	23.73	101.....	44	24	0.55154	1.21
52.....	81,796	854	0.01044	22.96	102.....	20	12	0.59913	1.09
53.....	80,942	903	0.01115	22.20	103.....	8	5	0.65042	0.98
54.....	80,039	948	0.01184	21.44	104.....	3	2	0.70557	0.88
					105.....	1	1	0.76474	0.78

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

MARITIME PROVINCES

Age x	(B) Females				Age x	(B) Females			
	l_x	d_x	q_x	\hat{e}_x		l_x	d_x	q_x	\hat{e}_x
5.....	100,000	229	.00229	62.98	57.....	76,837	1,023	.01331	20.10
6.....	99,771	186	.00186	62.13	58.....	75,814	1,085	.01431	19.46
7.....	99,585	155	.00156	61.24	59.....	74,729	1,148	.01536	18.74
8.....	99,430	135	.00136	60.34	60.....	73,581	1,213	.01648	18.02
9.....	99,295	125	.00126	59.42	61.....	72,368	1,283	.01773	17.31
10.....	99,170	123	.00124	58.49	62.....	71,085	1,361	.01914	16.62
11.....	99,047	129	.00130	57.56	63.....	69,724	1,439	.02064	15.93
12.....	98,918	140	.00142	56.64	64.....	68,285	1,517	.02221	15.26
13.....	98,778	156	.00158	55.72	65.....	66,768	1,599	.02395	14.59
14.....	98,622	180	.00183	54.80	66.....	65,169	1,690	.02594	13.94
15.....	98,442	209	.00212	53.90	67.....	63,479	1,796	.02829	13.30
16.....	98,233	240	.00244	53.02	68.....	61,683	1,910	.03097	12.67
17.....	97,993	269	.00275	52.15	69.....	59,773	2,026	.03390	12.06
18.....	97,724	301	.00308	51.29	70.....	57,747	2,145	.03715	11.46
19.....	97,423	335	.00344	50.45	71.....	55,602	2,265	.04073	10.89
20.....	97,088	370	.00381	49.62	72.....	53,337	2,384	.04469	10.33
21.....	96,718	400	.00414	48.81	73.....	50,953	2,491	.04889	9.79
22.....	96,318	425	.00441	48.01	74.....	48,462	2,583	.05330	9.26
23.....	95,893	443	.00462	47.22	75.....	45,879	2,667	.05814	8.76
24.....	95,450	456	.00478	46.43	76.....	43,212	2,749	.06361	8.27
25.....	94,994	465	.00490	45.65	77.....	40,463	2,830	.06993	7.79
26.....	94,529	471	.00498	44.88	78.....	37,633	2,908	.07727	7.34
27.....	94,058	473	.00503	44.10	79.....	34,725	2,968	.08548	6.92
28.....	93,585	469	.00501	43.32	80.....	31,757	2,995	.09432	6.52
29.....	93,116	458	.00492	42.53	81.....	28,762	2,978	.10354	6.14
30.....	92,658	447	.00482	41.74	82.....	25,784	2,911	.11289	5.79
31.....	92,211	437	.00474	40.94	83.....	22,873	2,795	.12220	5.47
32.....	91,774	435	.00474	40.14	84.....	20,078	2,643	.13164	5.16
33.....	91,339	444	.00486	39.32	85.....	17,435	2,466	.14146	4.87
34.....	90,895	459	.00505	38.51	86.....	14,969	2,274	.15191	4.59
35.....	90,436	477	.00527	37.71	87.....	12,695	2,072	.16325	4.32
36.....	89,959	493	.00548	36.90	88.....	10,623	1,862	.17528	4.06
37.....	89,466	504	.00563	36.10	89.....	8,761	1,648	.18807	3.82
38.....	88,962	505	.00568	35.31	90.....	7,113	1,435	.20168	3.59
39.....	88,457	502	.00568	34.50	91.....	5,678	1,227	.21615	3.37
40.....	87,955	499	.00567	33.70	92.....	4,451	1,031	.23156	3.16
41.....	87,456	497	.00568	32.89	93.....	3,420	848	.24796	2.96
42.....	86,959	502	.00577	32.07	94.....	2,572	683	.26541	2.77
43.....	86,457	514	.00594	31.26	95.....	1,889	536	.28398	2.59
44.....	85,943	529	.00615	30.44	96.....	1,353	411	.30371	2.42
45.....	85,414	548	.00642	29.63	97.....	942	306	.32468	2.26
46.....	84,866	569	.00671	28.81	98.....	636	221	.34693	2.11
47.....	84,297	593	.00704	28.00	99.....	415	154	.37055	1.97
48.....	83,704	618	.00738	27.20	100.....	261	103	.39556	1.83
49.....	83,086	642	.00773	26.40	101.....	158	67	.42205	1.70
50.....	82,444	670	.00813	25.60	102.....	91	41	.45007	1.58
51.....	81,774	702	.00859	24.81	103.....	50	24	.47967	1.47
52.....	81,072	743	.00916	24.02	104.....	26	13	.51092	1.36
53.....	80,329	790	.00983	23.23	105.....	13	7	.54388	1.25
54.....	79,539	842	.01059	22.46	106.....	6	3	.57861	1.15
55.....	78,697	900	.01143	21.69	107.....	3	2	.61516	1.04
56.....	77,797	960	.01234	20.94	108.....	1	1	.65360	.90

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

QUEBEC									
Age x	(A) Males				Age x	(A) Males			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
5.....	100,000	345	.00345	60.76	56.....	76,192	1,185	.01555	18.60
6.....	99,655	306	.00307	59.97	57.....	75,007	1,253	.01670	17.89
7.....	99,349	269	.00271	59.15	58.....	73,754	1,331	.01804	17.18
8.....	99,080	235	.00237	58.31	59.....	72,423	1,414	.01953	16.49
9.....	98,845	207	.00209	57.45	60.....	71,009	1,504	.02118	15.81
10.....	98,638	184	.00187	56.57	61.....	69,505	1,599	.02301	15.14
11.....	98,454	171	.00174	55.67	62.....	67,906	1,701	.02505	14.48
12.....	98,283	168	.00171	54.77	63.....	66,205	1,805	.02726	13.84
13.....	98,115	177	.00180	53.86	64.....	64,400	1,908	.02962	13.21
14.....	97,938	197	.00201	52.96	65.....	62,492	2,012	.03219	12.60
15.....	97,741	223	.00228	52.06	66.....	60,480	2,120	.03505	12.01
16.....	97,518	252	.00258	51.18	67.....	58,360	2,233	.03826	11.42
17.....	97,266	275	.00283	50.31	68.....	56,127	2,342	.04173	10.86
18.....	96,991	298	.00307	49.46	69.....	53,785	2,442	.04541	10.31
19.....	96,693	323	.00334	48.61	70.....	51,343	2,539	.04945	9.78
20.....	96,370	346	.00359	47.77	71.....	48,804	2,635	.05399	9.26
21.....	96,024	364	.00379	46.94	72.....	46,169	2,732	.05917	8.76
22.....	95,660	375	.00392	46.11	73.....	43,437	2,827	.06509	8.28
23.....	95,285	375	.00394	45.29	74.....	40,610	2,909	.07163	7.82
24.....	94,910	368	.00388	44.47	75.....	37,701	2,967	.07869	7.38
25.....	94,542	357	.00378	43.64	76.....	34,734	2,991	.08612	6.97
26.....	94,185	347	.00368	42.81	77.....	31,743	2,978	.09381	6.58
27.....	93,838	343	.00365	41.96	78.....	28,765	2,918	.10144	6.21
28.....	93,495	344	.00368	41.11	79.....	25,847	2,819	.10908	5.85
29.....	93,151	348	.00374	40.26	80.....	23,028	2,699	.11722	5.51
30.....	92,803	355	.00383	39.41	81.....	20,329	2,569	.12635	5.18
31.....	92,448	364	.00394	38.56	82.....	17,760	2,432	.13694	4.85
32.....	92,084	376	.00408	37.71	83.....	15,328	2,292	.14955	4.54
33.....	91,708	390	.00425	36.87	84.....	13,036	2,136	.16386	4.25
34.....	91,318	406	.00445	36.02	85.....	10,900	1,952	.17904	3.99
35.....	90,912	425	.00467	35.18	86.....	8,948	1,738	.19425	3.75
36.....	90,487	445	.00492	34.34	87.....	7,210	1,504	.20864	3.53
37.....	90,042	466	.00517	33.51	88.....	5,706	1,274	.22330	3.33
38.....	89,576	487	.00544	32.68	89.....	4,432	1,056	.23823	3.15
39.....	89,089	510	.00573	31.86	90.....	3,376	856	.25343	2.97
40.....	88,579	535	.00604	31.04	91.....	2,520	678	.26890	2.81
41.....	88,044	559	.00635	30.22	92.....	1,842	524	.28464	2.66
42.....	87,485	582	.00665	29.41	93.....	1,318	396	.30065	2.52
43.....	86,903	600	.00690	28.61	94.....	922	292	.31693	2.39
44.....	86,303	613	.00710	27.80	95.....	630	210	.33348	2.27
45.....	85,690	628	.00733	27.00	96.....	420	147	.35030	2.16
46.....	85,062	650	.00764	26.19	97.....	273	100	.36739	2.05
47.....	84,412	684	.00810	25.39	98.....	173	67	.38475	1.95
48.....	83,728	733	.00875	24.59	99.....	106	43	.40238	1.85
49.....	82,995	792	.00954	23.81	100.....	63	26	.42028	1.76
50.....	82,203	857	.01042	23.03	101.....	37	16	.43845	1.68
51.....	81,346	922	.01134	22.27	102.....	21	10	.45689	1.60
52.....	80,424	984	.01223	21.52	103.....	11	5	.47560	1.52
53.....	79,440	1,036	.01304	20.78	104.....	6	3	.49458	1.45
54.....	78,404	1,082	.01380	20.05	105.....	3	2	.51383	1.38
55.....	77,322	1,130	.01461	19.32	106.....	1	1	.53335	1.31

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

QUEBEC

Age x	(B) Females				Age x	(B) Females			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
5.....	100,000	326	.00326	60.69	57.....	74,212	1,101	.01484	18.57
6.....	99,674	273	.00274	59.88	58.....	73,111	1,186	.01622	17.84
7.....	99,401	233	.00234	59.05	59.....	71,925	1,278	.01777	17.13
8.....	99,168	204	.00206	58.19	60.....	70,647	1,375	.01947	16.43
9.....	98,964	187	.00189	57.30	61.....	69,272	1,474	.02128	15.75
10.....	98,777	179	.00181	56.41	62.....	67,798	1,571	.02317	15.08
11.....	98,598	179	.00182	55.51	63.....	66,227	1,656	.02501	14.42
12.....	98,419	188	.00191	54.61	64.....	64,571	1,733	.02684	13.78
13.....	98,231	202	.00206	53.72	65.....	62,838	1,811	.02882	13.15
14.....	98,029	226	.00231	52.83	66.....	61,027	1,900	.03114	12.52
15.....	97,803	255	.00261	51.95	67.....	59,127	2,008	.03396	11.91
16.....	97,548	285	.00292	51.08	68.....	57,119	2,128	.03725	11.31
17.....	97,263	309	.00318	50.23	69.....	54,991	2,250	.04092	10.73
18.....	96,954	329	.00339	49.39	70.....	52,741	2,372	.04498	10.17
19.....	96,625	346	.00358	48.56	71.....	50,360	2,493	.04949	9.62
20.....	96,279	363	.00377	47.73	72.....	47,876	2,609	.05449	9.10
21.....	95,916	379	.00395	46.91	73.....	45,267	2,711	.05990	8.59
22.....	95,537	394	.00412	46.09	74.....	42,556	2,796	.06570	8.11
23.....	95,143	409	.00430	45.28	75.....	39,760	2,863	.07200	7.64
24.....	94,734	425	.00449	44.47	76.....	36,897	2,911	.07889	7.20
25.....	94,309	439	.00466	43.67	77.....	33,986	2,940	.08651	6.77
26.....	93,870	453	.00483	42.87	78.....	31,046	2,941	.09473	6.36
27.....	93,417	464	.00497	42.08	79.....	28,105	2,908	.10348	5.98
28.....	92,953	472	.00508	41.29	80.....	25,197	2,845	.11293	5.61
29.....	92,481	479	.00518	40.50	81.....	22,352	2,755	.12324	5.26
30.....	92,002	484	.00526	39.70	82.....	19,597	2,637	.13455	4.93
31.....	91,518	489	.00534	38.91	83.....	16,960	2,500	.14742	4.62
32.....	91,029	495	.00544	38.12	84.....	14,460	2,339	.16173	4.33
33.....	90,534	501	.00553	37.32	85.....	12,121	2,142	.17668	4.07
34.....	90,033	507	.00563	36.53	86.....	9,979	1,911	.19146	3.83
35.....	89,526	513	.00573	35.73	87.....	8,068	1,656	.20528	3.62
36.....	89,013	521	.00585	34.93	88.....	6,412	1,405	.21916	3.42
37.....	88,492	531	.00600	34.14	89.....	5,007	1,167	.23310	3.25
38.....	87,961	544	.00618	33.34	90.....	3,840	949	.24709	3.08
39.....	87,417	559	.00640	32.54	91.....	2,891	755	.26115	2.93
40.....	86,858	576	.00663	31.75	92.....	2,136	588	.27526	2.78
41.....	86,282	593	.00687	30.96	93.....	1,548	448	.28943	2.65
42.....	85,689	610	.00712	30.17	94.....	1,100	334	.30366	2.53
43.....	85,079	626	.00736	29.38	95.....	766	244	.31795	2.41
44.....	84,453	642	.00760	28.60	96.....	522	173	.33230	2.31
45.....	83,811	658	.00785	27.81	97.....	349	121	.34671	2.21
46.....	83,153	676	.00813	27.03	98.....	228	82	.36117	2.11
47.....	82,477	695	.00843	26.25	99.....	146	55	.37570	2.02
48.....	81,782	715	.00874	25.47	100.....	91	36	.39028	1.94
49.....	81,067	734	.00905	24.69	101.....	55	22	.40492	1.86
50.....	80,333	755	.00940	23.91	102.....	33	14	.41962	1.78
51.....	79,578	782	.00983	23.13	103.....	19	8	.43438	1.71
52.....	78,796	819	.01039	22.35	104.....	11	5	.44920	1.64
53.....	77,977	862	.01105	21.58	105.....	6	3	.46407	1.57
54.....	77,115	910	.01180	20.82	106.....	3	1	.47901	1.49
55.....	76,205	965	.01266	20.06	107.....	2	1	.49400	1.40
56.....	75,240	1,028	.01366	19.31	108.....	1	1	.50905	1.28

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

ONTARIO									
Age x	(A) Males				Age x	(A) Males			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
5.....	100,000	215	.00215	62.20	55.....	80,313	1,112	.01385	19.49
6.....	99,785	206	.00206	61.33	56.....	79,201	1,188	.01500	18.76
7.....	99,579	192	.00193	60.46	57.....	78,013	1,268	.01625	18.04
8.....	99,387	178	.00179	59.57	58.....	76,745	1,348	.01756	17.33
9.....	99,209	163	.00164	58.68	59.....	75,397	1,426	.01891	16.63
10.....	99,046	151	.00152	57.78	60.....	73,971	1,508	.02038	15.94
11.....	98,895	143	.00145	56.86	61.....	72,463	1,598	.02205	15.26
12.....	98,752	143	.00145	55.95	62.....	70,865	1,699	.02398	14.59
13.....	98,609	153	.00155	55.03	63.....	69,166	1,809	.02615	13.94
14.....	98,456	169	.00172	54.11	64.....	67,357	1,920	.02850	13.30
15.....	98,287	191	.00194	53.20	65.....	65,437	2,034	.03109	12.67
16.....	98,096	212	.00216	52.31	66.....	63,403	2,153	.03396	12.06
17.....	97,884	230	.00235	51.42	67.....	61,250	2,275	.03714	11.47
18.....	97,654	244	.00250	50.54	68.....	58,975	2,390	.04052	10.89
19.....	97,410	259	.00266	49.66	69.....	56,585	2,492	.04404	10.33
20.....	97,151	272	.00280	48.79	70.....	54,093	2,593	.04793	9.79
21.....	96,879	283	.00292	47.93	71.....	51,500	2,698	.05239	9.25
22.....	96,596	293	.00303	47.07	72.....	48,802	2,812	.05762	8.74
23.....	96,303	300	.00311	46.21	73.....	45,990	2,931	.06373	8.24
24.....	96,003	304	.00317	45.35	74.....	43,059	3,039	.07058	7.77
25.....	95,699	307	.00321	44.50	75.....	40,020	3,122	.07802	7.32
26.....	95,392	310	.00325	43.64	76.....	36,898	3,170	.08590	6.90
27.....	95,082	312	.00328	42.78	77.....	33,728	3,173	.09408	6.50
28.....	94,770	314	.00331	41.92	78.....	30,555	3,127	.10235	6.12
29.....	94,456	313	.00331	41.05	79.....	27,428	3,039	.11080	5.76
30.....	94,143	313	.00332	40.19	80.....	24,389	2,921	.11976	5.42
31.....	93,830	313	.00334	39.32	81.....	21,468	2,781	.12954	5.09
32.....	93,517	319	.00341	38.45	82.....	18,687	2,625	.14046	4.77
33.....	93,198	329	.00353	37.58	83.....	16,062	2,450	.15254	4.47
34.....	92,869	341	.00367	36.71	84.....	13,612	2,254	.16557	4.18
35.....	92,528	356	.00385	35.85	85.....	11,358	2,039	.17952	3.91
36.....	92,172	372	.00404	34.98	86.....	9,319	1,811	.19438	3.66
37.....	91,800	389	.00424	34.12	87.....	7,508	1,578	.21014	3.42
38.....	91,411	407	.00445	33.27	88.....	5,930	1,345	.22681	3.20
39.....	91,004	425	.00467	32.41	89.....	4,585	1,121	.24439	2.99
40.....	90,579	445	.00491	31.56	90.....	3,464	911	.26286	2.79
41.....	90,134	466	.00517	30.71	91.....	2,553	721	.28222	2.61
42.....	89,668	490	.00547	29.87	92.....	1,832	554	.30246	2.44
43.....	89,178	516	.00579	29.03	93.....	1,278	414	.32357	2.28
44.....	88,662	543	.00613	28.20	94.....	864	299	.34555	2.13
45.....	88,119	573	.00650	27.37	95.....	565	208	.36838	1.99
46.....	87,546	606	.00692	26.55	96.....	357	140	.39206	1.86
47.....	86,940	645	.00742	25.73	97.....	217	90	.41658	1.74
48.....	86,295	689	.00799	24.92	98.....	127	56	.44193	1.63
49.....	85,606	737	.00861	24.11	99.....	71	33	.46811	1.52
50.....	84,869	780	.00930	23.32	100.....	38	19	.49510	1.43
51.....	84,080	846	.01006	22.53	101.....	19	10	.52290	1.33
52.....	83,234	907	.01090	21.76	102.....	9	5	.55150	1.25
53.....	82,327	973	.01182	20.99	103.....	4	2	.58089	1.17
54.....	81,354	1,041	.01279	20.24	104.....	2	1	.61107	1.09
					105.....	1	1	.64202	1.01

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

ONTARIO									
Age x	(B) Females				Age x	(B) Females			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
5.....	100,000	165	·00165	63·86	55.....	82,188	985	·01199	20·61
6.....	99,835	146	·00146	62·97	56.....	81,203	1,058	·01303	19·85
7.....	99,689	132	·00132	62·06	57.....	80,145	1,130	·01410	19·10
8.....	99,557	122	·00123	61·14	58.....	79,015	1,195	·01513	18·37
9.....	99,435	116	·00117	60·21	59.....	77,820	1,255	·01613	17·65
10.....	99,319	114	·00115	59·28	60.....	76,565	1,318	·01721	16·93
11.....	99,205	116	·00117	58·35	61.....	75,247	1,391	·01849	16·21
12.....	99,089	121	·00122	57·42	62.....	73,856	1,482	·02007	15·51
13.....	98,968	128	·00129	56·49	63.....	72,374	1,589	·02195	14·82
14.....	98,840	139	·00141	55·56	64.....	70,785	1,702	·02405	14·14
15.....	98,701	153	·00155	54·64	65.....	69,083	1,823	·02639	13·47
16.....	98,548	168	·00170	53·72	66.....	67,260	1,949	·02897	12·83
17.....	98,380	183	·00186	52·81	67.....	65,311	2,077	·03180	12·19
18.....	98,197	199	·00203	51·91	68.....	63,234	2,192	·03466	11·58
19.....	97,998	219	·00223	51·02	69.....	61,042	2,292	·03754	10·98
20.....	97,779	238	·00243	50·13	70.....	58,750	2,395	·04077	10·38
21.....	97,541	256	·00262	49·25	71.....	56,355	2,519	·04469	9·80
22.....	97,285	269	·00277	48·38	72.....	53,836	2,672	·04963	9·24
23.....	97,016	279	·00288	47·51	73.....	51,164	2,854	·05578	8·70
24.....	96,737	286	·00296	46·65	74.....	48,310	3,040	·06292	8·18
25.....	96,451	291	·00302	45·78	75.....	45,270	3,203	·07076	7·70
26.....	96,160	295	·00307	44·92	76.....	42,067	3,324	·07901	7·24
27.....	95,865	300	·00313	44·06	77.....	38,743	3,385	·08738	6·82
28.....	95,565	304	·00318	43·19	78.....	35,358	3,386	·09577	6·43
29.....	95,261	307	·00322	42·33	79.....	31,972	3,337	·10437	6·06
30.....	94,954	310	·00326	41·47	80.....	28,635	3,245	·11333	5·70
31.....	94,644	314	·00332	40·60	81.....	25,390	3,118	·12281	5·37
32.....	94,330	323	·00342	39·73	82.....	22,272	2,961	·13295	5·05
33.....	94,007	336	·00357	38·87	83.....	19,311	2,770	·14346	4·75
34.....	93,671	352	·00376	38·00	84.....	16,541	2,551	·15423	4·46
35.....	93,319	370	·00397	37·15	85.....	13,990	2,318	·16572	4·18
36.....	92,949	388	·00417	36·29	86.....	11,672	2,082	·17836	3·91
37.....	92,561	402	·00434	35·44	87.....	9,590	1,847	·19261	3·65
38.....	92,159	409	·00444	34·59	88.....	7,743	1,612	·20814	3·41
39.....	91,750	413	·00450	33·75	89.....	6,131	1,380	·22504	3·17
40.....	91,337	416	·00456	32·90	90.....	4,751	1,156	·24341	2·95
41.....	90,921	423	·00465	32·05	91.....	3,595	947	·26335	2·73
42.....	90,498	437	·00483	31·19	92.....	2,648	755	·28496	2·53
43.....	90,061	460	·00511	30·34	93.....	1,893	584	·30834	2·34
44.....	89,601	488	·00545	29·50	94.....	1,309	437	·33358	2·16
45.....	89,113	520	·00584	28·65	95.....	872	315	·36079	1·99
46.....	88,593	555	·00626	27·82	96.....	557	217	·39006	1·83
47.....	88,038	591	·00671	26·99	97.....	340	143	·42148	1·68
48.....	87,447	624	·00714	26·17	98.....	197	90	·45517	1·54
49.....	86,823	658	·00758	25·35	99.....	107	53	·49121	1·41
50.....	86,165	694	·00806	24·54	100.....	54	29	·52970	1·29
51.....	85,471	736	·00861	23·74	101.....	25	14	·57075	1·17
52.....	84,735	786	·00928	22·94	102.....	11	7	·61445	1·07
53.....	83,949	847	·01009	22·15	103.....	4	3	·66089	·97
54.....	83,102	914	·01100	21·37	104.....	1	1	·71019	·87

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

PRAIRIE PROVINCES									
Age x	(A) Males				Age x	(A) Males			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
5.....	100,000	207	.00207	64.45	55.....	83,722	944	.01127	20.78
6.....	99,793	188	.00188	63.58	56.....	82,778	1,023	.01236	20.01
7.....	99,605	171	.00172	62.70	57.....	81,755	1,103	.01349	19.25
8.....	99,434	157	.00158	61.80	58.....	80,652	1,178	.01461	18.51
9.....	99,277	147	.00148	60.90	59.....	79,474	1,251	.01574	17.77
10.....	99,130	140	.00141	59.99	60.....	78,223	1,326	.01695	17.05
11.....	98,990	138	.00139	59.07	61.....	76,897	1,410	.01834	16.34
12.....	98,852	140	.00142	58.16	62.....	75,487	1,509	.01999	15.63
13.....	98,712	149	.00151	57.24	63.....	73,978	1,616	.02184	14.94
14.....	98,563	164	.00166	56.32	64.....	72,362	1,725	.02384	14.26
15.....	98,399	181	.00184	55.42	65.....	70,637	1,842	.02607	13.60
16.....	98,218	198	.00202	54.52	66.....	68,795	1,968	.02860	12.95
17.....	98,020	213	.00217	53.63	67.....	66,827	2,107	.03153	12.32
18.....	97,807	223	.00228	52.74	68.....	64,720	2,254	.03482	11.70
19.....	97,584	232	.00238	51.86	69.....	62,466	2,400	.03842	11.11
20.....	97,352	240	.00247	50.98	70.....	60,066	2,545	.04237	10.53
21.....	97,112	247	.00254	50.11	71.....	57,521	2,686	.04670	9.97
22.....	96,865	252	.00260	49.24	72.....	54,835	2,822	.05147	9.44
23.....	96,613	256	.00265	48.36	73.....	52,013	2,941	.05654	8.92
24.....	96,357	257	.00267	47.49	74.....	49,072	3,037	.06188	8.43
25.....	96,100	259	.00269	46.62	75.....	46,035	3,116	.06769	7.95
26.....	95,841	258	.00269	45.74	76.....	42,919	3,183	.07416	7.49
27.....	95,583	257	.00269	44.86	77.....	39,736	3,238	.08149	7.05
28.....	95,326	255	.00267	43.98	78.....	36,498	3,281	.08990	6.63
29.....	95,071	250	.00263	43.10	79.....	33,217	3,297	.09926	6.24
30.....	94,821	245	.00258	42.21	80.....	29,920	3,268	.10923	5.87
31.....	94,576	242	.00256	41.32	81.....	26,652	3,185	.11949	5.53
32.....	94,334	245	.00260	40.42	82.....	23,467	3,043	.12969	5.21
33.....	94,089	254	.00270	39.53	83.....	20,424	2,843	.13921	4.91
34.....	93,835	267	.00285	38.63	84.....	17,581	2,607	.14829	4.62
35.....	93,568	284	.00303	37.74	85.....	14,974	2,363	.15784	4.34
36.....	93,284	300	.00322	36.86	86.....	12,611	2,129	.16880	4.06
37.....	92,984	315	.00339	35.97	87.....	10,482	1,909	.18208	3.79
38.....	92,669	328	.00354	35.09	88.....	8,573	1,689	.19699	3.52
39.....	92,341	339	.00367	34.22	89.....	6,884	1,471	.21375	3.26
40.....	92,002	351	.00381	33.34	90.....	5,413	1,259	.23256	3.01
41.....	91,651	364	.00397	32.47	91.....	4,154	1,054	.25364	2.77
42.....	91,287	382	.00419	31.59	92.....	3,100	859	.27720	2.54
43.....	90,905	405	.00446	30.72	93.....	2,241	680	.30345	2.32
44.....	90,500	432	.00477	29.86	94.....	1,561	519	.33260	2.12
45.....	90,068	460	.00511	29.00	95.....	1,042	380	.36486	1.92
46.....	89,608	492	.00549	28.15	96.....	662	265	.40045	1.74
47.....	89,116	526	.00590	27.30	97.....	397	175	.43958	1.57
48.....	88,590	561	.00633	26.46	98.....	222	107	.48245	1.42
49.....	88,029	596	.00677	25.62	99.....	115	61	.52928	1.27
50.....	87,433	634	.00725	24.80	100.....	54	31	.58028	1.13
51.....	86,799	679	.00782	23.97	101.....	23	15	.63567	1.01
52.....	86,120	733	.00851	23.16	102.....	8	6	.69564	.89
53.....	85,387	797	.00933	22.35	103.....	2	2	.76043	.78
54.....	84,590	868	.01026	21.56					

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

PRAIRIE PROVINCES

Age x	(B) Females				Age x	(B) Females			
	l_x	d_x	q_x	\hat{e}_x		l_x	d_x	q_x	\hat{e}_x
5.....	100,000	176	.00176	65.37	56.....	82,878	896	.01081	21.06
6.....	99,824	154	.00154	64.48	57.....	81,982	953	.01163	20.28
7.....	99,670	138	.00138	63.58	58.....	81,029	1,012	.01249	19.51
8.....	99,532	126	.00127	62.67	59.....	80,017	1,068	.01335	18.75
9.....	99,406	120	.00121	61.75	60.....	78,949	1,130	.01431	18.00
10.....	99,286	119	.00120	60.82	61.....	77,819	1,205	.01548	17.26
11.....	99,167	120	.00121	59.90	62.....	76,614	1,299	.01695	16.52
12.....	99,047	124	.00125	58.97	63.....	75,315	1,409	.01871	15.80
13.....	98,923	130	.00131	58.04	64.....	73,906	1,530	.02070	15.09
14.....	98,793	138	.00140	57.12	65.....	72,376	1,659	.02292	14.40
15.....	98,655	150	.00152	56.20	66.....	70,717	1,796	.02540	13.72
16.....	98,505	162	.00164	55.28	67.....	68,921	1,940	.02815	13.07
17.....	98,343	174	.00177	54.37	68.....	66,981	2,085	.03113	12.43
18.....	98,169	188	.00192	53.47	69.....	64,896	2,227	.03432	11.81
19.....	97,981	204	.00208	52.57	70.....	62,669	2,368	.03779	11.22
20.....	97,777	220	.00225	51.68	71.....	60,301	2,510	.04162	10.64
21.....	97,567	235	.00241	50.79	72.....	57,791	2,650	.04586	10.08
22.....	97,322	247	.00254	49.91	73.....	55,141	2,776	.05034	9.54
23.....	97,075	256	.00264	49.04	74.....	52,365	2,881	.05502	9.02
24.....	96,819	263	.00272	48.17	75.....	49,484	2,977	.06016	8.51
25.....	96,556	268	.00278	47.30	76.....	46,507	3,070	.06602	8.02
26.....	96,288	273	.00284	46.43	77.....	43,437	3,165	.07287	7.56
27.....	96,015	280	.00292	45.56	78.....	40,272	3,265	.08108	7.11
28.....	95,735	287	.00300	44.69	79.....	37,007	3,348	.09046	6.69
29.....	95,448	294	.00308	43.82	80.....	33,659	3,382	.10048	6.31
30.....	95,154	301	.00316	42.96	81.....	30,277	3,348	.11058	5.96
31.....	94,853	308	.00325	42.09	82.....	26,929	3,237	.12022	5.64
32.....	94,545	316	.00334	41.23	83.....	23,692	3,055	.12895	5.34
33.....	94,229	324	.00344	40.36	84.....	20,637	2,830	.13712	5.06
34.....	93,905	332	.00354	39.50	85.....	17,807	2,589	.14542	4.78
35.....	93,573	341	.00364	38.64	86.....	15,218	2,352	.15455	4.51
36.....	93,232	351	.00376	37.78	87.....	12,866	2,125	.16520	4.24
37.....	92,881	361	.00389	36.92	88.....	10,741	1,900	.17685	3.98
38.....	92,520	374	.00404	36.06	89.....	8,841	1,677	.18965	3.73
39.....	92,146	389	.00422	35.21	90.....	7,164	1,460	.20377	3.48
40.....	91,757	405	.00441	34.35	91.....	5,704	1,251	.21937	3.25
41.....	91,352	419	.00459	33.50	92.....	4,453	1,054	.23662	3.02
42.....	90,933	432	.00475	32.66	93.....	3,399	869	.25567	2.80
43.....	90,501	438	.00484	31.81	94.....	2,530	700	.27668	2.59
44.....	90,063	440	.00488	30.96	95.....	1,830	549	.29982	2.39
45.....	89,623	441	.00492	30.11	96.....	1,281	417	.32525	2.20
46.....	89,182	449	.00503	29.26	97.....	864	305	.35313	2.02
47.....	88,733	469	.00529	28.40	98.....	559	214	.38362	1.85
48.....	88,264	503	.00570	27.55	99.....	345	144	.41689	1.69
49.....	87,761	547	.00623	26.71	100.....	201	91	.45309	1.54
50.....	87,214	597	.00685	25.87	101.....	110	54	.49239	1.39
51.....	86,617	650	.00750	25.05	102.....	56	30	.53494	1.26
52.....	85,967	701	.00815	24.23	103.....	26	15	.58092	1.14
53.....	85,266	749	.00878	23.43	104.....	11	7	.63047	1.02
54.....	84,517	795	.00941	22.63	105.....	4	3	.68377	.92
55.....	83,722	844	.01008	21.84	106.....	1	1	.74098	.82

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

BRITISH COLUMBIA									
Age x	(A) Males				Age x	(A) Males			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
5.....	100,000	270	.00270	61.78	55.....	78,353	1,073	.01370	20.24
6.....	99,730	261	.00262	60.95	56.....	77,280	1,131	.01464	19.51
7.....	99,469	243	.00244	60.11	57.....	76,149	1,194	.01568	18.79
8.....	99,226	218	.00220	59.25	58.....	74,955	1,255	.01674	18.08
9.....	99,008	193	.00195	58.38	59.....	73,700	1,313	.01781	17.38
10.....	98,815	171	.00173	57.50	60.....	72,387	1,374	.01898	16.69
11.....	98,644	156	.00158	56.59	61.....	71,013	1,444	.02033	16.00
12.....	98,488	153	.00155	55.68	62.....	69,569	1,528	.02197	15.32
13.....	98,335	164	.00167	54.77	63.....	68,041	1,624	.02387	14.66
14.....	98,171	188	.00191	53.86	64.....	66,417	1,724	.02596	14.00
15.....	97,983	218	.00222	52.96	65.....	64,693	1,830	.02828	13.36
16.....	97,765	249	.00255	52.08	66.....	62,863	1,941	.03087	12.74
17.....	97,516	277	.00284	51.21	67.....	60,922	2,056	.03375	12.13
18.....	97,239	302	.00311	50.36	68.....	58,866	2,170	.03687	11.53
19.....	96,937	330	.00340	49.51	69.....	56,696	2,279	.04019	10.95
20.....	96,607	356	.00369	48.68	70.....	54,417	2,385	.04382	10.39
21.....	96,251	378	.00393	47.86	71.....	52,032	2,490	.04786	9.85
22.....	95,873	393	.00410	47.04	72.....	49,542	2,596	.05240	9.32
23.....	95,480	400	.00419	46.23	73.....	46,946	2,686	.05722	8.80
24.....	95,080	400	.00421	45.43	74.....	44,260	2,756	.06227	8.31
25.....	94,680	397	.00419	44.62	75.....	41,504	2,816	.06786	7.83
26.....	94,283	393	.00417	43.80	76.....	38,688	2,875	.07432	7.36
27.....	93,890	391	.00416	42.98	77.....	35,813	2,936	.08197	6.91
28.....	93,499	389	.00416	42.16	78.....	32,877	3,000	.09126	6.48
29.....	93,110	386	.00415	41.34	79.....	29,877	3,046	.10196	6.08
30.....	92,724	384	.00414	40.51	80.....	26,831	3,043	.11343	5.72
31.....	92,340	384	.00416	39.67	81.....	23,788	2,973	.12497	5.38
32.....	91,956	387	.00421	38.84	82.....	20,815	2,829	.13593	5.08
33.....	91,569	396	.00432	38.00	83.....	17,986	2,619	.14561	4.80
34.....	91,173	407	.00446	37.16	84.....	15,367	2,373	.15444	4.54
35.....	90,766	420	.00463	36.32	85.....	12,994	2,124	.16349	4.27
36.....	90,346	434	.00480	35.49	86.....	10,870	1,889	.17380	4.01
37.....	89,912	445	.00495	34.66	87.....	8,981	1,674	.18644	3.75
38.....	89,467	454	.00507	33.83	88.....	7,307	1,466	.20061	3.49
39.....	89,013	459	.00516	33.00	89.....	5,841	1,265	.21655	3.24
40.....	88,554	466	.00526	32.17	90.....	4,576	1,073	.23451	3.00
41.....	88,088	476	.00540	31.34	91.....	3,503	892	.25473	2.77
42.....	87,612	491	.00560	30.50	92.....	2,611	724	.27745	2.55
43.....	87,121	511	.00587	29.67	93.....	1,887	572	.30293	2.33
44.....	86,610	535	.00618	28.84	94.....	1,315	436	.33140	2.13
45.....	86,075	562	.00653	28.02	95.....	879	319	.36310	1.93
46.....	85,513	595	.00696	27.20	96.....	560	223	.39830	1.75
47.....	84,918	634	.00747	26.39	97.....	337	147	.43722	1.58
48.....	84,284	680	.00807	25.58	98.....	190	91	.48011	1.42
49.....	83,604	732	.00876	24.79	99.....	99	52	.52722	1.27
50.....	82,872	789	.00952	24.00	100.....	47	27	.57879	1.13
51.....	82,083	847	.01032	23.23	101.....	20	13	.63506	1.01
52.....	81,236	905	.01114	22.47	102.....	7	5	.69629	.89
53.....	80,331	961	.01196	21.71	103.....	2	2	.76271	.78
54.....	79,370	1,017	.01281	20.97					

TABLE 2. Life Tables for regional divisions of Canada, (A) Males, (B) Females, based on population, 1931 and deaths, 1930-32—Con.

BRITISH COLUMBIA

Age x	(B) Females				Age x	(B) Females			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
5.....	100,000	269	.00269	64.34	57.....	80,224	980	.01221	20.27
6.....	99,731	221	.00222	63.52	58.....	79,244	1,059	.01337	19.51
7.....	99,510	191	.00192	62.66	59.....	78,185	1,144	.01463	18.77
8.....	99,319	174	.00175	61.78	60.....	77,041	1,232	.01599	18.04
9.....	99,145	168	.00169	60.88	61.....	75,809	1,322	.01744	17.33
10.....	98,977	168	.00170	59.98	62.....	74,487	1,414	.01898	16.63
11.....	98,809	174	.00176	59.09	63.....	73,073	1,503	.02057	15.94
12.....	98,635	182	.00185	58.19	64.....	71,570	1,591	.02223	15.26
13.....	98,453	190	.00193	57.30	65.....	69,979	1,679	.02400	14.60
14.....	98,263	201	.00205	56.41	66.....	68,300	1,770	.02592	13.94
15.....	98,062	216	.00220	55.52	67.....	66,530	1,866	.02804	13.30
16.....	97,846	229	.00234	54.64	68.....	64,664	1,946	.03010	12.67
17.....	97,617	242	.00248	53.77	69.....	62,718	2,011	.03206	12.05
18.....	97,375	252	.00259	52.90	70.....	60,707	2,084	.03433	11.43
19.....	97,123	262	.00270	52.04	71.....	58,623	2,186	.03729	10.82
20.....	96,861	272	.00281	51.18	72.....	56,437	2,334	.04136	10.22
21.....	96,589	283	.00293	50.32	73.....	54,103	2,539	.04692	9.64
22.....	96,306	295	.00306	49.47	74.....	51,564	2,769	.05370	9.09
23.....	96,011	310	.00323	48.62	75.....	48,795	2,983	.06113	8.58
24.....	95,701	329	.00344	47.77	76.....	45,812	3,142	.06858	8.10
25.....	95,372	348	.00365	46.94	77.....	42,670	3,221	.07548	7.66
26.....	95,024	363	.00382	46.11	78.....	39,449	3,199	.08108	7.25
27.....	94,661	371	.00392	45.28	79.....	36,250	3,109	.08577	6.84
28.....	94,290	369	.00391	44.46	80.....	33,141	3,005	.09067	6.44
29.....	93,921	358	.00381	43.63	81.....	30,136	2,920	.09688	6.03
30.....	93,563	345	.00369	42.79	82.....	27,216	2,872	.10551	5.62
31.....	93,218	334	.00358	41.95	83.....	24,344	2,864	.11765	5.23
32.....	92,884	330	.00355	41.10	84.....	21,480	2,848	.13257	4.86
33.....	92,554	333	.00360	40.24	85.....	18,632	2,769	.14862	4.52
34.....	92,221	341	.00370	39.39	86.....	15,863	2,604	.16414	4.22
35.....	91,880	352	.00383	38.53	87.....	13,259	2,353	.17747	3.96
36.....	91,528	362	.00396	37.68	88.....	10,906	2,092	.19180	3.70
37.....	91,166	372	.00408	36.83	89.....	8,814	1,826	.20714	3.46
38.....	90,794	377	.00415	35.98	90.....	6,988	1,562	.22347	3.24
39.....	90,417	380	.00420	35.12	91.....	5,426	1,307	.24081	3.02
40.....	90,037	384	.00426	34.27	92.....	4,119	1,067	.25915	2.82
41.....	89,653	390	.00435	33.41	93.....	3,052	850	.27850	2.64
42.....	89,263	403	.00452	32.56	94.....	2,202	658	.29884	2.46
43.....	88,860	425	.00478	31.70	95.....	1,544	494	.32019	2.30
44.....	88,435	452	.00511	30.85	96.....	1,050	360	.34254	2.14
45.....	87,983	482	.00548	30.01	97.....	690	252	.36589	2.00
46.....	87,501	513	.00586	29.17	98.....	438	171	.39025	1.87
47.....	86,988	540	.00621	28.34	99.....	267	111	.41560	1.74
48.....	86,448	561	.00649	27.51	100.....	156	69	.44196	1.62
49.....	85,887	578	.00673	26.69	101.....	87	41	.46932	1.51
50.....	85,309	596	.00699	25.87	102.....	46	23	.49768	1.40
51.....	84,713	621	.00733	25.05	103.....	23	12	.52705	1.30
52.....	84,092	658	.00783	24.23	104.....	11	6	.55742	1.18
53.....	83,434	708	.00849	23.42	105.....	5	3	.58879	1.14
54.....	82,726	767	.00927	22.61	106.....	2	1	.62116	1.06
55.....	81,959	832	.01015	21.82	107.....	1	1	.65453	.97
56.....	81,127	903	.01113	21.04					

TABLE 3. Probabilities of dying within one year, (A) Males, (B) Females, for Maritime and Prairie Provinces, based on population, 1931 and deaths, 1930-32

MARITIME PROVINCES						
Age <i>x</i>	(A) Males			(B) Females		
	Prince Edward Island	Nova Scotia	New Brunswick	Prince Edward Island	Nova Scotia	New Brunswick
7.....	.00189	.00198	.00210	.00159	.00148	.00166
12.....	.00071	.00139	.00162	.00099	.00150	.00140
17.....	.00305	.00307	.00287	.00293	.00298	.00245
22.....	.00264	.00423	.00410	.00422	.00429	.00460
27.....	.00350	.00468	.00394	.00448	.00535	.00475
32.....	.00301	.00417	.00427	.00531	.00473	.00465
37.....	.00412	.00528	.00434	.00529	.00525	.00617
42.....	.00381	.00605	.00497	.00501	.00606	.00555
47.....	.00631	.00722	.00695	.00610	.00698	.00734
52.....	.00562	.01186	.00961	.00604	.00934	.00971
57.....	.01064	.01518	.01388	.01104	.01293	.01442
62.....	.01740	.01994	.02125	.01405	.01970	.01968
67.....	.02851	.03309	.03618	.02162	.02766	.03113
72.....	.04981	.04904	.05235	.03769	.04607	.04488
77.....	.06248	.07855	.08286	.05393	.06855	.07749
82.....	.09929	.12526	.14319	.09220	.10691	.13102
87.....	.16716	.18838	.16987	.13783	.16441	.17102
92.....	.27672	.24701	.28808	.24066	.22397	.24525

PRAIRIE PROVINCES						
Age <i>x</i>	(A) Males			(B) Females		
	Manitoba	Saskatch- ewan	Alberta	Manitoba	Saskatch- ewan	Alberta
7.....	.00160	.00156	.00205	.00128	.00123	.00167
12.....	.00152	.00124	.00158	.00116	.00119	.00143
17.....	.00198	.00200	.00260	.00154	.00160	.00225
22.....	.00285	.00235	.00270	.00261	.00226	.00282
27.....	.00291	.00248	.00278	.00311	.00254	.00316
32.....	.00285	.00213	.00291	.00333	.00328	.00342
37.....	.00373	.00299	.00356	.00394	.00358	.00419
42.....	.00441	.00386	.00439	.00497	.00447	.00486
47.....	.00663	.00494	.00642	.00538	.00512	.00540
52.....	.00910	.00752	.00913	.00861	.00784	.00802
57.....	.01495	.01270	.01302	.01196	.01115	.01182
62.....	.02260	.01761	.01990	.01758	.01553	.01781
67.....	.03061	.03040	.03387	.02872	.02714	.02866
72.....	.05151	.04860	.05484	.04262	.04649	.04929
77.....	.08515	.07840	.08077	.07782	.06833	.07158
82.....	.12796	.12845	.13335	.12029	.11619	.12518
87.....	.18051	.17449	.19643	.15147	.16531	.18798
92.....	.28544	.24445	.30737	.20679	.24197	.29476

TABLE 4. Probabilities of dying within five years, (A) Males, (B) Females, Canada and regional divisions, based on population, 1931 and deaths, 1930-32

Age x	Canada	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia
(A) MALES						
5.....	.01081	.01016	.01362	.00954	.00870	.01185
10.....	.00806	.00776	.00909	.00766	.00737	.00842
15.....	.01249	.01459	.01403	.01156	.01064	.01404
20.....	.01635	.01984	.01897	.01495	.01286	.01995
25.....	.01685	.02111	.01839	.01626	.01331	.02066
30.....	.01769	.02068	.02038	.01715	.01321	.02112
35.....	.02164	.02364	.02566	.02106	.01674	.02437
40.....	.02688	.02708	.03262	.02716	.02102	.02799
45.....	.03564	.03519	.04069	.03688	.02926	.03721
50.....	.05208	.05105	.05938	.05368	.04244	.05453
55.....	.07543	.06953	.08165	.07897	.06568	.07614
60.....	.11012	.09899	.11994	.11537	.09698	.10629
65.....	.16709	.15752	.17841	.17336	.14965	.15884
70.....	.25144	.22948	.26570	.26016	.23359	.23730
75.....	.37447	.33924	.38919	.39058	.35006	.35353
80.....	.52035	.49485	.52666	.53430	.49953	.51571
85.....	.67324	.63124	.69028	.69502	.63851	.64784
90.....	.81286	.78464	.81339	.83689	.80750	.80791
95.....	.91645	.92200	.90000	.93274	.94818	.94653
100.....	.96825	.98876	.95238	.97369	-	-
(B) FEMALES						
5.....	.00895	.00830	.01223	.00681	.00714	.01023
10.....	.00763	.00734	.00986	.00622	.00635	.00924
15.....	.01169	.01375	.01558	.00934	.00890	.01225
20.....	.01628	.02157	.02046	.01358	.01249	.01537
25.....	.01899	.02459	.02446	.01552	.01452	.01897
30.....	.02046	.02398	.02691	.01722	.01662	.01799
35.....	.02355	.02743	.02980	.02124	.01941	.02006
40.....	.02705	.02889	.03508	.02435	.02326	.02281
45.....	.03371	.03477	.04150	.03308	.02688	.03039
50.....	.04560	.04545	.05139	.04616	.04004	.03927
55.....	.06664	.06501	.07293	.06842	.05701	.06001
60.....	.09769	.09259	.11054	.09772	.08326	.09167
65.....	.14731	.13511	.16068	.14957	.13412	.13250
70.....	.22603	.20552	.24613	.22945	.21039	.19622
75.....	.35027	.30781	.36627	.36746	.31980	.32081
80.....	.49586	.45099	.51895	.51144	.47096	.43780
85.....	.64465	.59203	.68319	.66040	.59769	.62495
90.....	.77976	.73443	.80052	.81646	.74456	.77905
95.....	.88579	.86183	.88120	.93807	.89016	.89896
100.....	.95420	.95019	.93407	-	.98010	.96795

TABLE 5. Comparison of Canadian Life Table No. 1 with most recent official tables of England and the United States

Probability of Dying within One Year (q_x)				Age x	Probability of Dying within One Year (q_x)			
Canadian Life Table No. 1 ¹	English Life Table No. 10 ²	United States Life Table 1930 ³	Canadian Life Table No. 1 ¹		English Life Table No. 10 ²	United States Life Table 1930 ³		
(A) MALES								
5.....	.00262	.00343	.00266	48.....	.00770	.00990	.01122	
6.....	.00239	.00260	.00227	49.....	.00833	.01057	.01198	
7.....	.00216	.00218	.00196					
8.....	.00194	.00185	.00172	50.....	.00903	.01128	.01278	
9.....	.00175	.00161	.00155	51.....	.00979	.01206	.01365	
				52.....	.01060	.01295	.01459	
10.....	.00160	.00146	.00147	53.....	.01144	.01393	.01566	
11.....	.00152	.00139	.00149	54.....	.01233	.01499	.01687	
12.....	.00152	.00141	.00157					
13.....	.00162	.00151	.00171	55.....	.01329	.01614	.01819	
14.....	.00182	.00170	.00190	56.....	.01433	.01744	.01966	
				57.....	.01549	.01890	.02125	
15.....	.00207	.00197	.00213	58.....	.01671	.02050	.02290	
16.....	.00232	.00227	.00241	59.....	.01798	.02224	.02461	
17.....	.00254	.00259	.00266					
18.....	.00272	.00284	.00286	60.....	.01938	.02415	.02644	
19.....	.00291	.00302	.00301	61.....	.02096	.02630	.02838	
				62.....	.02282	.02875	.03052	
20.....	.00308	.00316	.00318	63.....	.02492	.03150	.03297	
21.....	.00323	.00325	.00338	64.....	.02722	.03455	.03568	
22.....	.00334	.00330	.00353					
23.....	.00340	.00334	.00361	65.....	.02975	.03791	.03865	
24.....	.00341	.00333	.00366	66.....	.03256	.04162	.04196	
				67.....	.03567	.04568	.04558	
25.....	.00340	.00330	.00371	68.....	.03899	.05014	.04949	
26.....	.00338	.00327	.00375	69.....	.04250	.05502	.05362	
27.....	.00339	.00328	.00381					
28.....	.00339	.00331	.00390	70.....	.04634	.06035	.05796	
29.....	.00340	.00335	.00402	71.....	.05067	.06615	.06252	
				72.....	.05563	.07246	.06740	
30.....	.00341	.00340	.00413	73.....	.06123	.07938	.07271	
31.....	.00344	.00349	.00426	74.....	.06736	.08697	.07861	
32.....	.00352	.00361	.00442					
33.....	.00364	.00378	.00463	75.....	.07403	.09519	.08526	
34.....	.00380	.00398	.00486	76.....	.08124	.10397	.09274	
				77.....	.08900	.11325	.10105	
35.....	.00398	.00421	.00510	78.....	.09724	.12313	.11013	
36.....	.00418	.00447	.00535	79.....	.10597	.13373	.11983	
37.....	.00437	.00474	.00563					
38.....	.00456	.00502	.00597	80.....	.11527	.14500	.12997	
39.....	.00474	.00531	.00636	81.....	.12521	.15687	.14043	
				82.....	.13586	.16927	.15117	
40.....	.00494	.00562	.00679	83.....	.14717	.18229	.16214	
41.....	.00516	.00598	.00727	84.....	.15907	.19607	.17333	
42.....	.00542	.00639	.00776					
43.....	.00569	.00687	.00825	85.....	.17167	.21048	.18468	
44.....	.00597	.00741	.00874	86.....	.18506	.22544	.19618	
				87.....	.19933	.24078	.20780	
45.....	.00630	.00799	.00929	88.....	.21441	.25520	.21967	
46.....	.00668	.00861	.00988	89.....	.23033	.27031	.23211	
47.....	.00714	.00925	.01052	90.....	.24711	.28614	.24550	

¹ Based on population of the nine provinces, 1931 and the deaths of 1930-32.² Based on population of England and Wales, 1931 and deaths of 1930-32.³ Based on White population of Continental United States, 1930 and deaths of 1929-31.

TABLE 5. Comparison of Canadian Life Table No. 1 with most recent official tables of England and the United States—Con.

Probability of Dying within One Year (q_x)				Age x	Probability of Dying within One Year (q_x)		
Canadian Life Table No. 1 ¹	English Life Table No. 10 ²	United States Life Table 1930 ³	Canadian Life Table No. 1 ¹		English Life Table No. 10 ²	United States Life Table 1930 ³	
(B) FEMALES							
5.....	.00232	.00298	.00220	48.....	.00718	.00714	.00844
6.....	.00197	.00233	.00182	49.....	.00759	.00763	.00899
7.....	.00171	.00192	.00153				
8.....	.00154	.00162	.00132	50.....	.00804	.00816	.00959
9.....	.00144	.00143	.00119	51.....	.00857	.00875	.01024
				52.....	.00920	.00941	.01097
10.....	.00140	.00134	.00113	53.....	.00992	.01013	.01179
11.....	.00142	.00133	.00113	54.....	.01073	.01090	.01272
12.....	.00149	.00140	.00119				
13.....	.00159	.00152	.00130	55.....	.01162	.01174	.01375
14.....	.00175	.00170	.00145	56.....	.01259	.01269	.01490
				57.....	.01364	.01377	.01618
15.....	.00195	.00191	.00164	58.....	.01475	.01497	.01756
16.....	.00216	.00215	.00186	59.....	.01589	.01627	.01904
17.....	.00235	.00235	.00209				
18.....	.00254	.00250	.00231	60.....	.01714	.01770	.02063
19.....	.00275	.00260	.00254	61.....	.01855	.01930	.02232
				62.....	.02017	.02110	.02419
20.....	.00295	.00268	.00277	63.....	.02196	.02307	.02632
21.....	.00313	.00275	.00302	64.....	.02390	.02520	.02866
22.....	.00330	.00282	.00322				
23.....	.00344	.00288	.00331	65.....	.02603	.02755	.03125
24.....	.00356	.00293	.00335	66.....	.02842	.03019	.03415
				67.....	.03114	.03321	.03736
25.....	.00367	.00298	.00339	68.....	.03406	.03660	.04086
26.....	.00376	.00301	.00342	69.....	.03714	.04035	.04464
27.....	.00385	.00306	.00346				
28.....	.00391	.00311	.00354	70.....	.04057	.04451	.04866
29.....	.00395	.00315	.00364	71.....	.04453	.04916	.05297
				72.....	.04920	.05435	.05760
30.....	.00398	.00319	.00374	73.....	.05464	.06024	.06267
31.....	.00402	.00325	.00383	74.....	.06071	.06686	.06829
32.....	.00409	.00332	.00394				
33.....	.00420	.00341	.00406	75.....	.06735	.07414	.07460
34.....	.00433	.00352	.00419	76.....	.07450	.08197	.08168
				77.....	.08211	.09025	.08956
35.....	.00448	.00364	.00433	78.....	.09016	.09903	.09823
36.....	.00463	.00377	.00447	79.....	.09867	.10848	.10756
37.....	.00477	.00392	.00463				
38.....	.00489	.00407	.00483	80.....	.10769	.11858	.11742
39.....	.00500	.00423	.00506	81.....	.11725	.12931	.12767
				82.....	.12736	.14065	.13821
40.....	.00512	.00440	.00532	83.....	.13800	.15275	.14895
41.....	.00526	.00461	.00561	84.....	.14915	.16571	.15984
42.....	.00544	.00486	.00593				
43.....	.00565	.00515	.00627	85.....	.16086	.17942	.17086
44.....	.00588	.00548	.00663	86.....	.17316	.19373	.18204
				87.....	.18610	.20844	.19345
45.....	.00615	.00584	.00702	88.....	.19965	.22178	.20528
46.....	.00645	.00624	.00746	89.....	.21381	.23583	.21786
47.....	.00680	.00668	.00793	90.....	.22860	.25061	.23151

TABLE 5. Comparison of Canadian Life Table No. 1 with most recent official tables of England and the United States—Con.

Age <i>x</i>	(A) Males			(B) Females		
	Canadian Life Table No. 1 ¹	English Life Table No. 10 ²	United States Life Table 1930 ³	Canadian Life Table No. 1 ¹	English Life Table No. 10 ²	United States Life Table 1930 ³
NUMBER ALIVE AT EACH AGE OUT OF 100,000 ALIVE AT AGE 5 (<i>l_x</i>)						
5.....	100,000	100,000	100,000	100,000	100,000	100,000
10.....	98,919	98,839	98,988	99,105	98,976	99,195
15.....	98,122	98,103	98,186	98,349	98,257	98,582
20.....	96,896	96,865	96,911	97,199	97,130	97,557
25.....	95,312	95,287	95,240	95,617	95,772	96,039
30.....	93,706	93,724	93,426	93,801	94,315	94,374
35.....	92,048	92,024	91,360	91,882	92,751	92,525
40.....	90,056	89,859	88,793	89,718	90,944	90,388
45.....	87,635	86,997	85,401	87,291	88,738	87,732
50.....	84,512	83,041	80,978	84,348	85,802	84,290
55.....	80,111	77,764	75,193	80,502	81,816	79,730
60.....	74,068	70,635	67,511	75,137	76,289	73,444
65.....	65,912	60,952	57,734	67,797	68,510	64,902
70.....	54,899	48,142	45,652	57,810	57,750	53,566
75.....	41,095	32,936	32,125	44,743	43,510	39,719
80.....	25,706	17,985	18,771	29,071	27,024	24,731
85.....	12,330	7,080	8,254	14,656	12,599	11,733
90.....	4,029	1,786	2,568	5,208	3,924	3,990
95.....	754	258	503	1,147	740	855
100.....	63	17	44	131	69	79

PROBABILITY OF LIVING 10 YEARS (10 *p_x*)

5.....	.98122	.98103	.98186	.98349	.98257	.98582
10.....	.97955	.98003	.97901	.98077	.98135	.98349
15.....	.97136	.97130	.96999	.97222	.97471	.97421
20.....	.96708	.96757	.96404	.96504	.97101	.96737
25.....	.96575	.96576	.95927	.96094	.96846	.96341
30.....	.96105	.95876	.95041	.95647	.96426	.95776
35.....	.95206	.94537	.93477	.95003	.95673	.94820
40.....	.93844	.92412	.91199	.94015	.94346	.93254
45.....	.91414	.89387	.88048	.92223	.92199	.90879
50.....	.87642	.85060	.83369	.89080	.88913	.87133
55.....	.82276	.78381	.76781	.84218	.83738	.81402
60.....	.74120	.68156	.67621	.76939	.75699	.72934
65.....	.62348	.54036	.55643	.65996	.63509	.61198
70.....	.46824	.37358	.41120	.50287	.46795	.46169
75.....	.30004	.21497	.25693	.32756	.28956	.29540
80.....	.15673	.09933	.13681	.17915	.14520	.16132
85.....	.06115	.03638	.06088	.07826	.05875	.07287
90.....	.01564	.00957	.01698	.02515	.01767	.01990
95.....	.00265	-	.00217	.00523	.00323	.00125

TABLE 5. Comparison of Canadian Life Table No. 1 with most recent official tables of England and the United States—Con.

Age <i>x</i>	(A) Males			(B) Females		
	Canadian Life Table No. 1 ¹	English Life Table No. 10 ²	United States Life Table 1930 ²	Canadian Life Table No. 1 ¹	English Life Table No. 10 ²	United States Life Table 1930 ²
COMPLETE EXPECTATION OF LIFE (<i>e_x</i>)						
5.....	62.30	60.11	59.38	63.17	63.24	62.17
10.....	57.96	55.79	54.96	58.72	58.87	57.65
15.....	53.41	51.19	50.39	54.15	54.28	53.00
20.....	49.05	46.81	46.02	49.76	49.88	48.52
25.....	44.83	42.54	41.78	45.54	45.55	44.25
30.....	40.55	38.21	37.54	41.38	41.22	39.99
35.....	36.23	33.87	33.33	37.19	36.87	35.73
40.....	31.98	29.62	29.22	33.02	32.55	31.52
45.....	27.79	25.51	25.28	28.87	28.30	27.39
50.....	23.72	21.60	21.51	24.79	24.18	23.41
55.....	19.88	17.89	17.97	20.84	20.23	19.60
60.....	16.29	14.43	14.72	17.15	16.50	16.05
65.....	12.98	11.30	11.77	13.72	13.07	12.81
70.....	10.06	8.62	9.20	10.63	10.02	9.98
75.....	7.57	6.43	7.02	7.98	7.45	7.56
80.....	5.61	4.74	5.26	5.92	5.40	5.63
85.....	4.10	3.50	3.99	4.38	4.00	4.24
90.....	2.97	2.63	3.03	3.24	2.98	3.17
95.....	2.14	1.97	2.19	2.40	2.22	2.24
100.....	1.53	1.48	1.49	1.77	1.65	1.48

TABLE 6. Recent rates of mortality in various countries¹1,000 *q_x*

Age <i>x</i>	Sweden 1921-30		Norway 1921-30		Denmark 1926-30		Finland 1921-30	
	Males	Females	Males	Females	Males	Females	Males	Females
5.....	2.32	2.28	2.24	1.79	1.68	1.57	4.57	4.25
10.....	1.73	1.59	1.67	1.45	1.18	0.87	3.24	2.90
15.....	2.32	2.55	2.53	3.01	1.63	1.54	3.56	4.89
20.....	4.78	3.75	5.81	4.67	2.88	2.74	10.18	6.37
25.....	4.52	4.24	6.04	5.03	2.49	3.02	8.18	6.48
30.....	4.43	4.30	5.67	4.72	2.91	3.29	7.11	6.36
35.....	4.55	4.44	5.29	4.94	3.23	4.06	7.48	6.26
40.....	5.30	5.16	5.75	5.29	4.50	4.66	9.17	7.63
45.....	6.66	6.03	7.30	6.43	5.62	5.63	12.56	8.09
50.....	8.78	8.22	9.12	8.15	8.30	8.52	15.28	10.30
55.....	12.67	11.23	12.48	10.80	12.08	11.65	23.61	12.52
60.....	18.43	15.72	18.36	14.65	19.77	17.86	32.04	19.95
65.....	28.35	24.21	26.72	23.09	29.89	27.45	44.25	31.34
70.....	43.73	39.08	42.07	36.23	46.60	45.99	64.06	50.03
75.....	70.24	65.20	65.57	57.87	76.71	77.64	93.51	79.22
80.....	114.22	104.94	105.23	97.45	126.79	126.99	129.25	129.59
85.....	180.60	171.87	162.01	147.97	192.93	185.87	166.26	174.72
90.....	274.45	256.23	247.62	222.63	278.59	266.80	—	—

¹ For England and Wales and the United States, see Table 5.

TABLE 6. Recent rates of mortality in various countries¹—Con.
1,000 *q*_x

Age <i>x</i>	Germany 1924-26		Netherlands 1921-30		France 1920-23		Switzerland 1921-30		Italy 1930-32	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
5.....	2.42	2.19	2.46	2.09	3.48	3.78	2.44	2.18	3.65	3.66
10.....	1.42	1.20	1.31	1.20	1.91	2.14	1.55	1.38	1.99	1.79
15.....	1.94	1.81	1.70	1.77	2.72	3.55	1.98	2.13	2.38	2.64
20.....	4.27	3.32	2.80	2.61	6.39	5.19	3.65	3.49	4.14	3.88
25.....	4.39	3.94	2.83	2.96	6.50	5.93	3.94	3.98	4.27	4.46
30.....	4.05	4.14	2.76	3.19	6.60	5.90	4.12	4.01	4.66	4.39
35.....	4.25	4.52	3.15	3.81	7.54	6.16	4.86	4.43	5.30	4.81
40.....	5.35	5.31	3.80	4.71	8.98	6.74	6.43	5.24	6.36	5.43
45.....	7.23	6.44	5.28	5.62	10.79	8.11	9.21	6.54	7.94	6.20
50.....	10.30	8.86	7.74	7.96	14.30	10.37	13.44	9.32	10.63	8.20
55.....	15.48	12.73	12.04	11.68	20.05	13.89	19.50	13.81	14.68	11.36
60.....	23.62	19.47	19.12	17.60	28.31	19.89	28.43	20.91	21.92	17.47
65.....	36.92	31.55	30.89	28.13	40.48	30.05	42.58	33.70	33.19	28.40
70.....	58.08	51.98	49.32	46.19	65.12	50.94	64.91	54.52	53.23	46.53
75.....	93.91	85.29	79.08	75.51	91.99	79.47	101.00	88.57	87.79	79.61
80.....	141.96	133.71	127.3	118.0	169.07	134.24	151.42	139.12	137.99	127.02
85.....	212.85	198.37	189.8	176.1	239.00	211.50	222.86	202.37	206.64	191.19
90.....	284.69	263.08	276.2	254.3	306.50	262.00	291.73	278.91	290.32	267.86

Age <i>x</i>	Japan 1921-25		India 1921-30		South Africa 1925-27		Australia 1920-22		Canada 1930-32	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
5.....	7.04	7.76	19.3	16.5	2.92	2.37	2.52	2.40	2.62	2.32
10.....	3.17	3.73	7.9	8.1	1.79	1.48	1.56	1.27	1.60	1.40
15.....	5.97	9.01	9.8	11.5	2.06	1.91	1.84	1.44	2.07	1.95
20.....	10.80	12.08	12.7	17.6	3.44	2.60	2.84	2.52	3.08	2.95
25.....	9.51	11.17	15.3	21.6	3.82	3.25	3.55	3.27	3.40	3.67
30.....	8.23	10.45	19.3	25.1	4.16	3.98	3.90	3.87	3.41	3.98
35.....	8.71	10.73	24.1	29.3	6.07	4.75	4.75	4.50	3.98	4.48
40.....	10.53	11.34	29.4	34.5	7.16	5.43	6.17	5.24	4.94	5.12
45.....	13.71	11.30	34.9	39.0	9.55	6.30	8.44	6.06	6.30	6.15
50.....	18.62	13.82	41.0	43.1	12.27	8.63	11.58	8.08	9.03	8.04
55.....	26.27	18.39	48.1	47.5	17.35	12.79	15.52	11.03	13.29	11.62
60.....	39.15	26.40	57.9	54.3	24.71	17.25	24.07	15.71	19.38	17.14
65.....	57.05	39.77	72.7	66.6	34.82	28.92	35.52	24.26	29.75	26.03
70.....	84.80	61.57	97.6	88.8	51.69	42.97	52.90	40.90	46.34	40.57
75.....	124.46	95.85	142.7	130.1	83.10	71.89	83.40	68.20	74.03	67.35
80.....	182.74	150.26	218.0	206.6	119.12	103.09	133.40	112.30	115.27	107.69
85.....	264.60	233.15	360.8	347.6	185.53	172.33	195.80	172.00	171.67	160.86
90.....	372.76	353.51	577.0	566.7	251.46	237.95	283.00	251.00	247.11	228.60

TABLE 7. Canadian Life Table No. 1, (A) Males, (B) Females,
3% commutation columns

Age <i>x</i>	(A) Males					
	<i>D_x</i>	<i>N_x</i>	<i>S_x</i>	<i>C_x</i>	<i>M_x</i>	<i>R_x</i>
5...	86,260-88	2,404,598-86	55,239,607-05	219-4209	16,224-0202	795,678-2622
6...	83,529-01	2,318,337-98	52,835,008-19	193-5158	16,004-5993	779,454-2420
7...	80,902-61	2,234,808-97	50,516,670-21	169-7230	15,811-0835	763,449-6427
8...	78,376-50	2,153,906-36	48,281,861-24	147-9184	15,641-3605	747,638-5592
9...	75,945-77	2,075,529-86	46,127,954-88	128-7283	15,493-4421	731,997-1987
10...	73,605-03	1,999,584-09	44,052,425-02	114-1426	15,364-7138	716,503-7566
11...	71,347-05	1,925,979-06	42,052,840-93	105-2070	15,250-5712	701,139-0428
12...	69,163-77	1,854,632-01	40,126,861-87	102-1427	15,145-3642	685,888-4716
13...	67,047-15	1,785,468-24	38,272,229-86	105-7789	15,043-2215	670,743-1074
14...	64,988-54	1,718,421-09	36,486,761-62	114-8933	14,937-4426	655,699-8859
15...	62,980-78	1,653,432-55	34,768,340-53	126-5029	14,822-5493	640,762-4433
16...	61,019-88	1,590,451-77	33,114,907-98	137-3387	14,696-0464	625,939-8940
17...	59,105-27	1,529,431-90	31,524,456-21	145-6739	14,558-7077	611,243-8476
18...	57,238-08	1,470,326-63	29,905,024-31	151-1258	14,413-0338	596,685-1399
19...	55,419-83	1,413,088-55	28,524,697-68	156-6902	14,261-9080	582,272-1061
20...	53,648-97	1,357,668-72	27,111,609-13	160-1897	14,105-2178	568,010-1981
21...	51,926-19	1,304,019-75	25,753,940-41	162-8305	13,945-0281	553,904-9803
22...	50,250-94	1,252,093-56	24,449,920-66	163-1547	13,782-1976	539,950-9522
23...	48,624-17	1,201,842-62	23,197,827-10	160-3704	13,619-0429	526,177-7546
24...	47,047-50	1,153,218-45	21,995,984-48	155-6994	13,458-6725	512,558-7117
25...	45,521-54	1,106,170-89	20,842,766-03	150-2371	13,302-9731	499,100-0392
26...	44,045-44	1,060,649-35	19,736,595-14	144-5107	13,152-7360	485,797-0661
27...	42,618-44	1,016,603-91	18,675,945-79	140-3016	13,008-2253	472,644-3301
28...	41,236-05	973,985-86	17,659,341-88	135-7908	12,867-9237	459,636-1048
29...	39,899-59	932,749-42	16,685,356-02	131-8358	12,732-1329	446,768-1811
30...	38,605-63	892,849-83	15,752,606-60	127-9959	12,600-2971	434,036-0482
31...	37,353-20	854,244-20	14,859,756-77	124-6562	12,472-3012	421,435-7511
32...	36,140-59	816,891-00	14,005,512-57	123-6646	12,347-6450	408,963-4499
33...	34,964-28	780,750-41	13,188,621-57	123-7232	12,223-9804	396,615-8049
34...	33,822-18	745,786-13	12,407,871-16	124-7396	12,100-2572	384,391-8245
35...	32,712-33	711,963-95	11,662,085-03	126-2819	11,975-5176	372,291-5673
36...	31,633-26	679,251-62	10,950,121-08	128-2985	11,849-2357	360,316-0497
37...	30,583-61	647,618-36	10,270,869-46	129-7652	11,720-9372	348,466-8140
38...	29,563-06	617,034-75	9,623,251-10	131-0377	11,591-1720	336,745-8768
39...	28,570-96	587,471-69	9,006,216-35	131-5129	11,460-1343	325,154-7048
40...	27,607-28	558,900-73	8,418,744-66	132-4445	11,328-6214	313,694-5705
41...	26,670-74	531,293-45	7,859,843-93	133-4992	11,196-1769	302,365-9491
42...	25,760-43	504,622-71	7,328,550-48	135-5022	11,062-6777	291,169-7722
43...	24,874-62	478,862-28	6,823,927-77	137-5478	10,927-1755	280,107-0945
44...	24,012-57	453,987-66	6,345,065-49	139-0947	10,789-6277	269,179-9190
45...	23,174-08	429,975-09	5,891,077-83	141-7186	10,650-5330	258,390-2913
46...	22,357-39	406,801-01	5,461,102-74	145-0686	10,508-8144	247,739-7583
47...	21,561-13	384,443-62	5,054,301-73	149-5553	10,363-7458	237,230-9439
48...	20,783-58	362,882-49	4,669,858-11	155-3021	10,214-1905	226,867-1981
49...	20,022-93	342,098-91	4,306,975-62	161-9560	10,058-8884	216,653-0076
50...	19,277-79	322,075-98	3,964,876-71	168-9764	9,896-9324	206,594-1192
51...	18,547-32	302,798-19	3,642,800-73	176-3105	9,727-9560	196,697-1868
52...	17,830-80	284,250-87	3,340,002-54	183-4915	9,551-6455	186,969-2308
53...	17,127-96	266,420-07	3,055,751-67	190-3073	9,368-1540	177,417-5853
54...	16,438-78	249,292-11	2,789,331-60	196-7672	9,177-8467	168,049-4313

TABLE 7. Canadian Life Table No. 1, (A) Males, (B) Females,
3% commutation columns—Con.

Age x	(A) Males					
	D_x	N_x	S_x	C_x	M_x	R_x
55...	15,763-22	232,853-33	2,540,039-49	203-4534	8,981-0795	158,871-5846
56...	15,100-64	217,090-11	2,307,186-16	210-1397	8,777-6261	149,890-5051
57...	14,450-67	201,989-47	2,090,096-05	217-3443	8,567-4864	141,112-8790
58...	13,812-44	187,538-80	1,888,106-58	224-1258	8,350-1421	132,545-3926
59...	13,186-01	173,726-36	1,700,567-78	230-1581	8,126-0163	124,195-2505
60...	12,571-79	160,540-35	1,526,841-42	236-4728	7,895-8582	116,069-2342
61...	11,969-15	147,968-56	1,366,301-07	243-5044	7,659-3854	108,173-3760
62...	11,377-03	135,999-41	1,218,332-51	252-1003	7,415-8810	100,513-9906
63...	10,793-56	124,622-38	1,082,333-10	261-1954	7,163-7807	93,098-1096
64...	10,217-99	113,828-82	957,710-72	269-9860	6,902-5853	85,934-3289
65...	9,650-390	103,610-829	843,881-899	278-7538	6,632-5993	79,031-7436
66...	9,090-557	93,960-439	740,271-070	287-3338	6,353-8455	72,399-1443
67...	8,538-450	84,869-882	646,310-631	295-7134	6,066-5117	66,045-2988
68...	7,994-044	76,331-432	561,440-749	302-5807	5,770-7983	59,978-7871
69...	7,458-627	68,337-388	485,109-317	307-7867	5,468-2176	54,207-9888
70...	6,933-599	60,878-761	416,771-929	311-9422	5,160-4309	48,739-7712
71...	6,419-707	53,945-162	355,893-168	315-8327	4,848-4887	43,579-3403
72...	5,916-892	47,525-455	301,948-006	319-5786	4,532-6560	38,730-8516
73...	5,424-978	41,608-563	254,422-551	322-5018	4,213-0774	34,198-1956
74...	4,944-467	36,183-585	212,813-988	323-3494	3,890-5756	29,985-1182
75...	4,477-103	31,239-118	176,630-403	321-7586	3,567-2262	26,094-5426
76...	4,024-944	26,762-015	145,391-285	317-4188	3,245-4676	22,527-3164
77...	3,590-294	22,737-071	118,629-270	310-2673	2,928-0488	19,281-8488
78...	3,175-455	19,146-777	95,892-199	299-7785	2,617-7815	16,353-8000
79...	2,783-187	15,971-322	76,745-422	286-3482	2,318-0030	13,736-0185
80...	2,415-775	13,188-135	60,774-100	270-3438	2,031-6548	11,418-0155
81...	2,075-069	10,772-360	47,585-965	252-2828	1,761-3110	9,386-3607
82...	1,762-347	8,697-291	36,813-605	232-4644	1,509-0282	7,625-0497
83...	1,478-553	6,934-944	28,116-314	211-2485	1,276-5638	6,116-0215
84...	1,224-239	5,456-391	21,181-3697	189-0447	1,065-3153	4,839-4577
85...	999-5373	4,232-1517	15,724-9787	166-6171	876-2706	3,774-1424
86...	803-8074	3,232-6144	11,492-8270	144-4186	709-6535	2,897-8718
87...	635-9769	2,428-8070	8,260-2126	123-0752	565-2349	2,188-2183
88...	494-3781	1,792-8301	5,831-4056	102-9246	442-1597	1,622-9834
89...	377-0541	1,298-4520	4,038-5755	84-33292	339-23514	1,180-82372
90...	281-7391	921-3979	2,740-1235	67-61949	254-90222	841-58858
91...	205-9136	639-6588	1,818-7256	52-92865	187-28273	586-68636
92...	146-9874	433-7452	1,179-0668	40-44410	134-35408	399-40363
93...	102-2621	286-7578	745-3216	30-07089	93-90998	265-04955
94...	69-21274	184-49572	458-56375	21-71532	63-83909	171-13957
95...	45-48152	115-28298	274-06803	15-22649	42-12377	107-30048
96...	28-93033	69-80146	158-78505	10-29124	26-89728	65-17671
97...	17-79646	40-87113	88-98359	6-73460	16-60604	38-27943
98...	10-54351	23-07467	48-11246	4-23391	9-87144	21-67339
99...	6-00251	12-53116	25-03779	2-54961	5-63753	11-80195
100...	3-27807	6-52865	12-50663	1-46500	3-08792	6-16442
101...	1-71759	3-25058	5-97798	·83378	1-62292	3-07650
102...	·83378	1-53299	2-72740	·42856	·78914	1-45358
103...	·38094	·69921	1-19441	·18492	·30058	·66444
104...	·18492	·31827	·49520	·08977	·17566	·30386
105...	·08977	·13335	·17693	·04358	·08589	·12820
106...	·04358	·04358	·04358	·04231	·04231	·04231

TABLE 7. Canadian Life Table No. 1, (A) Males, (B) Females,
3% commutation columns—Con.

Age <i>x</i>	(B) Females					
	<i>D_x</i>	<i>N_x</i>	<i>S_x</i>	<i>C_x</i>	<i>M_x</i>	<i>R_x</i>
5...	86,260-88	2,415,938-94	55,892,033-93	194-2963	15,893-7270	788,015-6145
6...	83,554-13	2,329,678-06	53,476,094-99	160-1790	15,699-4307	772,121-8875
7...	80,960-34	2,246,123-93	51,146,416-93	134-1996	15,539-2517	756,422-4568
8...	78,468-07	2,165,163-59	48,900,293-00	117-2618	15,405-0521	740,883-2051
9...	76,065-33	2,086,695-52	46,735,129-41	106-4054	15,287-7903	725,478-1530
10...	73,743-43	2,010,630-19	44,648,433-89	100-4166	15,181-3849	710,190-3627
11...	71,495-14	1,936,886-76	42,637,803-70	98-8946	15,080-9683	695,008-9778
12...	69,313-87	1,865,391-62	40,700,916-94	100-0998	14,982-0737	679,928-0095
13...	67,194-92	1,796,077-75	38,835,525-32	103-7955	14,881-9739	664,945-9358
14...	65,133-99	1,728,882-83	37,039,447-57	110-4003	14,778-1784	650,063-9619
15...	63,126-48	1,663,748-84	35,310,564-74	119-6481	14,667-7781	635,285-7835
16...	61,168-20	1,600,622-36	33,646,815-90	128-2635	14,548-1300	620,618-0054
17...	59,258-34	1,539,454-16	32,046,193-54	135-1008	14,419-8665	606,069-8754
18...	57,397-26	1,480,195-82	30,506,739-38	141-4309	14,284-7657	591,650-0089
19...	55,584-07	1,422,798-56	29,026,543-56	148-3851	14,143-3348	577,365-2432
20...	53,816-73	1,367,214-49	27,603,745-00	154-2766	13,994-9497	563,221-9084
21...	52,094-98	1,313,397-76	26,236,530-51	158-1334	13,840-6731	549,226-9587
22...	50,419-51	1,261,302-78	24,923,132-75	161-6347	13,682-5397	535,386-2856
23...	48,789-35	1,210,883-27	23,661,829-97	162-8301	13,520-9050	521,703-7459
24...	47,205-47	1,162,093-92	22,450,946-70	163-3411	13,358-0749	508,182-8409
25...	45,667-21	1,114,888-45	21,288,852-78	162-7569	13,194-7338	494,824-7660
26...	44,174-34	1,069,221-24	20,173,964-33	161-1677	13,031-9769	481,630-0322
27...	42,726-54	1,025,046-90	19,104,743-09	159-5330	12,870-8092	468,598-0553
28...	41,322-55	982,320-36	18,079,696-19	157-0082	12,711-2762	455,727-2461
29...	39,961-97	940,997-81	17,097,375-83	153-2591	12,554-2680	443,015-9699
30...	38,644-77	901,035-84	16,156,378-02	149-1952	12,401-0089	430,461-7019
31...	37,370-00	862,391-07	15,255,342-18	146-0147	12,251-8137	418,060-6930
32...	36,135-54	825,021-07	14,392,951-11	143-6470	12,105-7990	405,808-8793
33...	34,939-40	788,885-53	13,567,930-04	142-3915	11,962-1520	393,703-0803
34...	33,779-36	753,946-13	12,779,044-51	142-1534	11,819-7605	381,740-9283
35...	32,653-34	720,166-77	12,025,098-38	142-1534	11,677-6071	369,921-1678
36...	31,560-12	687,513-43	11,304,931-61	142-0328	11,535-4537	358,243-5607
37...	30,498-86	655,953-31	10,617,418-18	141-1481	11,393-4209	346,708-1070
38...	29,469-39	625,454-45	9,961,464-87	139-8788	11,252-2728	335,314-6861
39...	28,471-18	595,985-06	9,336,010-42	138-2571	11,112-3940	324,062-4133
40...	27,503-67	567,513-88	8,740,025-36	136-6113	10,974-1369	312,950-0193
41...	26,565-98	540,010-21	8,172,511-48	135-8108	10,837-5256	301,975-8824
42...	25,656-40	513,444-23	7,632,501-27	135-5022	10,701-7148	291,138-3568
43...	24,773-63	487,787-83	7,119,057-04	135-9135	10,566-2126	280,436-6420
44...	23,916-15	463,014-20	6,631,269-21	136-4503	10,430-2991	269,870-4294
45...	23,083-11	439,098-05	6,168,255-01	137-8675	10,293-8488	259,440-1303
46...	22,272-92	416,014-94	5,729,156-96	139-5849	10,155-9813	249,146-2815
47...	21,484-61	393,742-02	5,313,142-02	141-8113	10,016-3964	238,990-3002
48...	20,717-03	372,257-41	4,919,400-00	144-4944	9,874-5851	228,973-9038
49...	19,969-13	351,540-38	4,547,142-59	147-1291	9,730-0907	219,099-3187
50...	19,240-38	331,571-25	4,195,602-21	150-1520	9,582-9616	209,369-2280
51...	18,529-82	312,330-87	3,864,030-96	154-1642	9,432-8096	199,786-2664
52...	17,835-96	293,801-05	3,551,700-09	159-2765	9,278-6454	190,353-4568
53...	17,157-19	275,965-09	3,257,899-04	165-1762	9,119-3689	181,074-8114
54...	16,492-29	258,807-90	2,981,933-95	171-7777	8,954-1927	171,955-4425

TABLE 7. Canadian Life Table No. 1, (A) Males, (B) Females,
3% commutation columns—Con.

Age x	(B) Females					
	D_x	N_x	S_x	C_x	M_x	R_x
55...	15,840-15	242,315-61	2,723,126-05	178-6187	8,782-4150	163,001-2498
56...	15,200-17	226,475-46	2,480,810-44	185-8429	8,603-7963	154,218-8348
57...	14,571-60	211,275-29	2,254,334-98	193-0349	8,417-9534	145,615-0385
58...	13,954-15	196,703-69	2,043,059-69	199-8251	8,224-9185	137,197-0851
59...	13,347-90	182,749-54	1,846,356-00	205-8862	8,025-0934	128,972-1666
60...	12,753-24	169,401-64	1,663,606-46	212-2488	7,819-2072	120,947-0732
61...	12,169-53	156,648-40	1,494,204-82	219-1859	7,606-9584	113,127-8660
62...	11,595-90	144,478-87	1,337,556-42	227-0922	7,387-7725	105,520-9076
63...	11,031-06	132,882-97	1,193,077-55	235-2568	7,160-6803	98,133-1351
64...	10,474-51	121,851-91	1,060,194-58	243-0460	6,925-4235	90,972-4548
65...	9,926-379	111,377-398	938,342-665	250-8926	6,682-3775	84,047-0313
66...	9,386-369	101,451-019	826,965-267	259-0420	6,431-4849	77,364-6538
67...	8,853-937	92,064-650	725,514-248	267-7097	6,172-4429	70,933-1689
68...	8,328-346	83,210-713	633,449-598	275-3927	5,904-7332	64,760-7260
69...	7,810-380	74,882-367	550,238-885	281-6431	5,629-3405	58,855-9928
70...	7,301-250	67,071-987	475,356-518	287-5411	5,347-6974	53,226-6523
71...	6,801-052	59,770-737	408,284-531	294-0470	5,060-1563	47,878-9549
72...	6,308-915	52,969-685	348,513-794	301-3170	4,766-1093	42,818-7986
73...	5,823-844	46,660-770	295,544-109	308-9240	4,464-7923	38,052-6893
74...	5,345-293	40,836-926	248,883-339	315-0695	4,155-8683	33,587-8970
75...	4,874-536	35,491-633	208,046-413	318-6912	3,840-7988	29,432-0287
76...	4,413-868	30,617-097	172,554-780	319-2673	3,522-1076	25,591-2299
77...	3,966-041	26,203-229	141,937-683	316-1497	3,202-8403	22,069-1223
78...	3,534-376	22,237-188	115,734-454	309-3613	2,886-6906	18,866-2820
79...	3,122-071	18,702-812	93,497-266	299-1291	2,577-3293	15,979-5914
80...	2,732-008	15,580-741	74,794-454	285-6721	2,278-2002	13,402-2621
81...	2,366-763	12,848-733	59,213-713	269-3792	1,992-5281	11,124-0619
82...	2,028-449	10,481-970	46,364-980	250-7829	1,723-1489	9,131-5338
83...	1,718-585	8,453-521	35,883-010	230-2859	1,472-3660	7,408-3849
84...	1,438-243	6,734-936	27,429-489	208-2572	1,242-0801	5,936-0189
85...	1,188-096	5,296-693	20,694-553	185-5848	1,033-8229	4,693-9388
86...	967-9060	4,108-5971	15,397-8599	162-7575	848-2381	3,660-1159
87...	776-9570	3,140-6911	11,289-2628	140-3607	685-4806	2,811-8778
88...	613-9666	2,363-7341	8,148-5717	118-9863	545-1199	2,126-3972
89...	477-0977	1,749-7675	5,784-8376	99-01775	426-13360	1,581-27726
90...	364-1839	1,272-6698	4,035-0701	80-85824	327-11585	1,155-14366
91...	272-7183	908-4859	2,762-4003	64-59537	246-25761	828-02781
92...	200-1797	635-7676	1,853-9144	50-55513	181-66224	581-77020
93...	143-7941	435-5879	1,218-1468	38-64482	131-10711	400-10796
94...	100-9611	291-7938	782-5589	28-83311	92-46229	269-00085
95...	69-18741	190-83266	490-76510	20-96570	63-62918	176-53856
96...	46-20654	121-64525	299-93244	14-83986	42-66348	112-90938
97...	30-02086	75-43871	178-28719	10-21230	27-82362	70-24590
98...	18-93416	45-41785	102-84848	6-80642	17-61132	42-42228
99...	11-57627	26-48369	57-43063	4-42279	10-80490	24-81096
100...	6-81630	14-90742	30-94694	2-72794	6-38211	14-00606
101...	3-88983	8-09112	16-03952	1-66756	3-65417	7-62395
102...	2-10898	4-20129	7-94840	-95235	1-98661	3-96978
103...	1-09520	2-09231	3-74711	-50854	1-03426	1-98317
104...	-55477	-99711	1-65480	-26930	-52572	-94891
105...	-26930	-44234	-65769	-13073	-25642	-42319
106...	-13073	-17304	-21535	-08461	-12569	-16677
107...	-04231	-04231	-04231	-04108	-04108	-04108

TABLE 8. Canadian Life Table No. 1, (A) Males, (B) Females, annuity values; single and annual life assurance premiums

Age x	Life Annuity Due a_x	20-Year Annuity Due $a_{x:\overline{20} }$	Single Premium for \$1,000.00			
			Whole- Life Assurance	20-Year Term Assurance	20-Year Pure Endowment	20-Year Endowment Assurance
			1,000 A_x	1,000 $A^1_{x:\overline{20} }$	1,000 $A_{x:\overline{20} }$	1,000 $A_{x:\overline{20} }$
(A) MALES						
5.....	27.876	15.052	188.08	33.86	527.72	561.58
10.....	27.166	15.036	208.75	37.56	524.50	562.05
15.....	26.253	14.949	235.35	45.20	519.40	564.61
20.....	25.307	14.889	262.92	51.75	514.59	566.35
25.....	24.300	14.854	292.23	58.27	509.08	567.35
30.....	23.127	14.785	326.39	70.03	499.35	569.38
35.....	21.764	14.646	366.09	91.54	481.87	573.41
40.....	20.245	14.430	410.35	124.34	455.38	579.72
45.....	18.554	14.083	459.59	173.38	416.43	589.81
50.....	16.707	13.549	513.39	245.70	359.67	605.37
55.....	14.772	12.790	569.75	343.45	284.02	627.47
60.....	12.770	11.721	628.06	466.46	192.16	658.62
65.....	10.736	10.298	687.29	596.49	103.57	700.06
70.....	8.780	8.647	744.26	707.50	40.63	748.14
75.....	6.978	6.952	796.77	787.36	10.16	797.52
80.....	5.459	5.457	841.00	839.72	1.36	841.07
85.....	4.234	4.234	876.68	876.59	0.09	876.68
90.....	3.270	-	904.75	-	-	-
95.....	2.535	-	926.17	-	-	-
100.....	1.992	-	941.99	-	-	-
(B) FEMALES						
5.....	28.007	15.083	184.25	31.29	529.41	560.70
10.....	27.265	15.047	205.87	37.70	524.04	561.75
15.....	26.356	14.948	232.35	47.37	517.27	564.64
20.....	25.404	14.860	260.05	56.13	511.06	567.19
25.....	24.413	14.798	288.93	63.52	505.46	568.99
30.....	23.316	14.736	320.89	72.92	497.88	570.80
35.....	22.055	14.634	357.62	88.66	485.10	573.77
40.....	20.634	14.475	399.00	114.70	463.69	578.40
45.....	19.022	14.197	445.94	156.45	430.03	586.48
50.....	17.233	13.747	498.06	220.11	379.48	599.59
55.....	15.298	13.057	554.43	311.96	307.73	619.69
60.....	13.283	12.061	613.12	434.48	214.22	648.70
65.....	11.220	10.687	673.19	569.04	119.69	688.74
70.....	9.186	9.012	732.44	687.63	49.88	737.51
75.....	7.281	7.242	787.93	774.88	14.19	789.07
80.....	5.703	5.698	833.89	831.56	2.50	834.05
85.....	4.458	4.458	870.15	869.94	0.23	870.16
90.....	3.495	-	898.22	-	-	-
95.....	2.758	-	919.66	-	-	-
100.....	2.187	-	936.30	-	-	-

TABLE 8. Canadian Life Table No. 1, (A) Males, (B) Females, annuity values; single and annual life assurance premiums—Con.

Annual Premium for \$1,000.00					
Age x	Whole- Life Assurance $1,000 P_x$	20-Payment Life Assurance $1,000_{20} P_x$	20-Year Term Assurance $1,000 P_{x:\overline{20} }$	20-Year Pure Endowment $1,000 P_{x:\overline{20} }^1$	20-Year Endowment Assurance $1,000 P_{x:\overline{20} }$
(A) MALES					
5.....	6.75	12.50	2.25	35.06	37.31
10.....	7.68	13.88	2.50	34.88	37.38
15.....	8.96	15.74	3.02	34.75	37.77
20.....	10.39	17.66	3.48	34.56	38.04
25.....	12.03	19.67	3.92	34.27	38.19
30.....	14.11	22.08	4.74	33.77	38.51
35.....	16.82	25.00	6.25	32.90	39.15
40.....	20.27	28.44	8.62	31.56	40.18
45.....	24.77	32.63	12.31	29.57	41.88
50.....	30.73	37.89	18.13	26.55	44.68
55.....	38.57	44.55	26.85	22.21	49.06
60.....	49.18	53.58	39.80	16.39	56.19
65.....	64.01	66.74	57.92	10.06	67.98
70.....	84.77	86.07	81.82	4.70	86.52
75.....	114.19	114.61	113.26	1.46	114.72
80.....	154.05	154.13	153.89	0.25	154.14
85.....	207.05	207.06	207.04	0.02	207.06
90.....	276.65	-	-	-	-
95.....	365.39	-	-	-	-
100.....	472.98	-	-	-	-
(B) FEMALES					
5.....	6.58	12.22	2.07	35.10	37.17
10.....	7.55	13.68	2.51	34.83	37.33
15.....	8.82	15.54	3.17	34.61	37.77
20.....	10.24	17.50	3.78	34.39	38.17
25.....	11.83	19.52	4.29	34.16	38.45
30.....	13.76	21.78	4.95	33.79	38.74
35.....	16.21	24.44	6.06	33.15	39.21
40.....	19.34	27.56	7.92	32.03	39.96
45.....	23.44	31.41	11.02	30.29	41.31
50.....	28.90	36.23	16.01	27.60	43.62
55.....	36.24	42.46	23.89	23.57	47.46
60.....	46.16	50.83	36.02	17.76	53.78
65.....	60.00	62.99	53.25	11.20	64.45
70.....	79.73	81.27	76.30	5.53	81.84
75.....	108.22	108.80	107.00	1.96	108.96
80.....	146.22	146.36	145.95	0.44	146.39
85.....	195.18	195.20	195.15	0.05	195.20
90.....	257.03	-	-	-	-
95.....	333.43	-	-	-	-
100.....	428.12	-	-	-	-

TABLE 9. Life Tables, (A) Males, (B) Females, based on population and deaths of the Registration Area of 1921¹ in each of the years 1921 and 1931

Age x	(A) Males				Age x	(A) Males			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x
1921									
5.....	100,000	367	0.00367	61.82	57.....	76,917	1,161	0.01509	18.77
6.....	99,633	335	0.00336	61.05	58.....	75,756	1,231	0.01625	18.05
7.....	99,298	301	0.00303	60.25	59.....	74,525	1,296	0.01739	17.34
8.....	98,997	268	0.00271	59.43	60.....	73,229	1,364	0.01862	16.63
9.....	98,729	239	0.00242	58.59	61.....	71,865	1,437	0.02000	15.94
10.....	98,490	216	0.00219	57.73	62.....	70,428	1,523	0.02163	15.26
11.....	98,274	200	0.00204	56.86	63.....	68,905	1,612	0.02339	14.58
12.....	98,074	196	0.00200	55.97	64.....	67,293	1,697	0.02522	13.92
13.....	97,878	205	0.00209	55.09	65.....	65,596	1,791	0.02730	13.27
14.....	97,673	225	0.00230	54.20	66.....	63,805	1,901	0.02979	12.62
15.....	97,448	250	0.00257	53.32	67.....	61,904	2,034	0.03286	12.00
16.....	97,198	277	0.00285	52.46	68.....	59,870	2,190	0.03658	11.39
17.....	96,921	299	0.00308	51.61	69.....	57,680	2,354	0.04082	10.80
18.....	96,622	314	0.00325	50.77	70.....	55,326	2,517	0.04550	10.24
19.....	96,308	327	0.00340	49.93	71.....	52,809	2,668	0.05053	9.70
20.....	95,981	340	0.00354	49.10	72.....	50,141	2,799	0.05582	9.19
21.....	95,641	350	0.00366	48.27	73.....	47,342	2,904	0.06134	8.71
22.....	95,291	358	0.00376	47.45	74.....	44,438	2,984	0.06714	8.24
23.....	94,933	365	0.00384	46.62	75.....	41,454	3,038	0.07329	7.80
24.....	94,568	370	0.00391	45.80	76.....	38,416	3,066	0.07981	7.38
25.....	94,198	372	0.00395	44.98	77.....	35,350	3,067	0.08677	6.97
26.....	93,826	372	0.00397	44.16	78.....	32,283	3,032	0.09392	6.59
27.....	93,454	372	0.00398	43.33	79.....	29,251	2,960	0.10121	6.22
28.....	93,082	367	0.00394	42.50	80.....	26,291	2,867	0.10904	5.87
29.....	92,715	357	0.00385	41.67	81.....	23,424	2,758	0.11775	5.52
30.....	92,358	346	0.00375	40.83	82.....	20,666	2,640	0.12773	5.19
31.....	92,012	340	0.00369	39.98	83.....	18,026	2,516	0.13958	4.88
32.....	91,672	340	0.00371	39.12	84.....	15,510	2,374	0.15306	4.59
33.....	91,332	349	0.00382	38.27	85.....	13,136	2,197	0.16726	4.33
34.....	90,983	363	0.00399	37.41	86.....	10,939	1,983	0.18124	4.10
35.....	90,620	381	0.00420	36.56	87.....	8,956	1,738	0.19408	3.90
36.....	90,239	399	0.00442	35.71	88.....	7,218	1,487	0.20600	3.71
37.....	89,840	416	0.00463	34.87	89.....	5,731	1,245	0.21724	3.55
38.....	89,424	429	0.00480	34.03	90.....	4,486	1,023	0.22800	3.39
39.....	88,995	441	0.00495	33.19	91.....	3,463	826	0.23852	3.25
40.....	88,554	453	0.00512	32.35	92.....	2,637	657	0.24902	3.11
41.....	88,101	467	0.00530	31.52	93.....	1,980	514	0.25972	2.97
42.....	87,634	485	0.00554	30.68	94.....	1,466	397	0.27085	2.84
43.....	87,149	507	0.00582	29.85	95.....	1,069	302	0.28263	2.71
44.....	86,642	531	0.00613	29.02	96.....	767	226	0.29529	2.58
45.....	86,111	558	0.00648	28.20	97.....	541	167	0.30905	2.44
46.....	85,553	586	0.00685	27.38	98.....	374	121	0.32413	2.31
47.....	84,967	617	0.00726	26.56	99.....	253	86	0.34076	2.18
48.....	84,350	646	0.00766	25.76	100.....	167	60	0.35916	2.06
49.....	83,704	674	0.00805	24.95	101.....	107	41	0.37955	1.93
50.....	83,030	705	0.00849	24.15	102.....	66	27	0.40217	1.80
51.....	82,325	743	0.00903	23.35	103.....	39	17	0.42722	1.67
52.....	81,582	793	0.00972	22.56	104.....	22	10	0.45495	1.55
53.....	80,789	856	0.01059	21.78	105.....	12	6	0.48556	1.42
54.....	79,933	928	0.01161	21.00	106.....	6	3	0.51929	1.30
55.....	79,005	1,005	0.01272	20.24	107.....	3	2	0.55636	1.15
56.....	78,000	1,083	0.01389	19.50	108.....	1	1	0.59700	0.98

¹ Canada excluding Quebec, Yukon and the Northwest Territories.

TABLE 9. Life Tables, (A) Males, (B) Females, based on population and deaths of the Registration Area of 1921¹ in each of the years 1921 and 1931—Con.

Age <i>x</i>	(B) Females				Age <i>x</i>	(B) Females			
	<i>l_x</i>	<i>d_x</i>	<i>q_x</i>	<i>e_x</i>		<i>l_x</i>	<i>d_x</i>	<i>q_x</i>	<i>e_x</i>
1921									
5.....	100,000	325	·00325	62·23	57.....	76,569	1,027	·01341	19·40
6.....	99,675	291	·00292	61·44	58.....	75,542	1,083	·01433	18·66
7.....	99,384	260	·00262	60·61	59.....	74,459	1,138	·01528	17·92
8.....	99,124	234	·00236	59·77	60.....	73,321	1,202	·01639	17·19
9.....	98,890	213	·00215	58·91	61.....	72,119	1,280	·01775	16·47
10.....	98,677	196	·00199	58·04	62.....	70,839	1,379	·01947	15·76
11.....	98,481	187	·00190	57·15	63.....	69,460	1,499	·02158	15·06
12.....	98,294	185	·00188	56·26	64.....	67,961	1,631	·02400	14·38
13.....	98,109	190	·00194	55·37	65.....	66,330	1,771	·02670	13·72
14.....	97,919	204	·00208	54·47	66.....	64,559	1,914	·02964	13·09
15.....	97,715	222	·00227	53·58	67.....	62,645	2,054	·03278	12·47
16.....	97,493	243	·00249	52·71	68.....	60,591	2,187	·03610	11·88
17.....	97,250	261	·00268	51·84	69.....	58,404	2,313	·03960	11·30
18.....	96,989	280	·00289	50·97	70.....	56,091	2,432	·04336	10·75
19.....	96,709	301	·00311	50·12	71.....	53,659	2,543	·04740	10·21
20.....	96,408	322	·00334	49·27	72.....	51,116	2,646	·05177	9·69
21.....	96,086	341	·00355	48·44	73.....	48,470	2,734	·05641	9·20
22.....	95,745	356	·00372	47·61	74.....	45,736	2,803	·06129	8·72
23.....	95,389	367	·00385	46·78	75.....	42,933	2,855	·06651	8·25
24.....	95,022	374	·00394	45·96	76.....	40,078	2,892	·07217	7·81
25.....	94,648	380	·00401	45·14	77.....	37,186	2,915	·07838	7·37
26.....	94,268	384	·00407	44·32	78.....	34,271	2,910	·08492	6·96
27.....	93,884	389	·00414	43·50	79.....	31,361	2,876	·09170	6·56
28.....	93,495	393	·00420	42·68	80.....	28,485	2,822	·09908	6·17
29.....	93,102	396	·00425	41·86	81.....	25,663	2,756	·10741	5·79
30.....	92,706	400	·00431	41·04	82.....	22,907	2,681	·11705	5·43
31.....	92,306	404	·00438	40·21	83.....	20,226	2,595	·12829	5·08
32.....	91,902	414	·00450	39·39	84.....	17,631	2,484	·14088	4·76
33.....	91,488	427	·00467	38·56	85.....	15,147	2,339	·15440	4·46
34.....	91,061	446	·00490	37·74	86.....	12,808	2,157	·16842	4·18
35.....	90,615	466	·00514	36·92	87.....	10,651	1,944	·18252	3·92
36.....	90,149	484	·00537	36·11	88.....	8,707	1,714	·19680	3·69
37.....	89,665	497	·00554	35·30	89.....	6,993	1,478	·21134	3·47
38.....	89,168	502	·00563	34·50	90.....	5,515	1,248	·22626	3·26
39.....	88,666	502	·00566	33·69	91.....	4,267	1,031	·24164	3·07
40.....	88,164	501	·00568	32·88	92.....	3,236	834	·25758	2·89
41.....	87,663	501	·00572	32·06	93.....	2,402	659	·27418	2·72
42.....	87,162	508	·00583	31·25	94.....	1,743	508	·29153	2·56
43.....	86,654	519	·00599	30·43	95.....	1,235	383	·30973	2·40
44.....	86,135	531	·00617	29·61	96.....	852	280	·32888	2·26
45.....	85,604	548	·00640	28·79	97.....	572	200	·34906	2·12
46.....	85,056	569	·00669	27·97	98.....	372	138	·37039	1·99
47.....	84,487	598	·00708	27·15	99.....	234	92	·39294	1·86
48.....	83,889	635	·00757	26·34	100.....	142	59	·41683	1·74
49.....	83,254	680	·00817	25·54	101.....	83	37	·44214	1·62
50.....	82,574	729	·00883	24·75	102.....	46	22	·46897	1·51
51.....	81,845	778	·00951	23·96	103.....	24	12	·49743	1·41
52.....	81,067	824	·01017	23·19	104.....	12	6	·52759	1·31
53.....	80,243	864	·01077	22·42	105.....	6	3	·55957	1·21
54.....	79,379	899	·01132	21·66	106.....	3	2	·59345	1·11
55.....	78,480	935	·01191	20·90	107.....	1	1	·62933	1·01
56.....	77,545	976	·01258	20·15					

¹ Canada excluding Quebec, Yukon and the Northwest Territories.

TABLE 9. Life Tables, (A) Males, (B) Females, based on population and deaths of the Registration Area of 1921¹ in each of the years 1921 and 1931—Con.

Age <i>x</i>	(A) Males				Age <i>x</i>	(A) Males			
	<i>l_x</i>	<i>d_x</i>	<i>q_x</i>	<i>e_x</i>		<i>l_x</i>	<i>d_x</i>	<i>q_x</i>	<i>e_x</i>
1931									
5.....	100,000	210	·00210	63·17	56.....	80,209	1,111	·01385	19·56
6.....	99,790	198	·00198	62·30	57.....	79,098	1,183	·01495	18·83
7.....	99,592	182	·00183	61·42	58.....	77,915	1,253	·01608	18·11
8.....	99,410	166	·00167	60·53	59.....	76,662	1,322	·01724	17·39
9.....	99,244	151	·00152	59·63	60.....	75,340	1,394	·01850	16·69
10.....	99,093	139	·00140	58·72	61.....	73,946	1,476	·01996	16·00
11.....	98,954	132	·00133	57·81	62.....	72,470	1,573	·02170	15·31
12.....	98,822	132	·00134	56·88	63.....	70,897	1,682	·02373	14·64
13.....	98,690	142	·00144	55·96	64.....	69,215	1,798	·02597	13·98
14.....	98,548	161	·00163	55·04	65.....	67,417	1,918	·02845	13·34
15.....	98,387	184	·00187	54·13	66.....	65,499	2,041	·03116	12·72
16.....	98,203	207	·00211	53·23	67.....	63,458	2,165	·03412	12·11
17.....	97,996	226	·00231	52·34	68.....	61,293	2,281	·03722	11·52
18.....	97,770	241	·00247	51·46	69.....	59,012	2,387	·04045	10·95
19.....	97,529	256	·00262	50·59	70.....	56,625	2,490	·04397	10·39
20.....	97,273	268	·00276	49·72	71.....	54,135	2,596	·04796	9·84
21.....	97,005	279	·00288	48·85	72.....	51,539	2,709	·05256	9·31
22.....	96,726	289	·00299	47·99	73.....	48,830	2,819	·05774	8·80
23.....	96,437	297	·00308	47·14	74.....	46,011	2,917	·06339	8·31
24.....	96,140	302	·00314	46·28	75.....	43,094	2,998	·06958	7·84
25.....	95,838	307	·00320	45·42	76.....	40,096	3,061	·07635	7·39
26.....	95,531	310	·00324	44·57	77.....	37,035	3,103	·08378	6·96
27.....	95,221	312	·00328	43·71	78.....	33,932	3,117	·09186	6·55
28.....	94,909	315	·00332	42·85	79.....	30,815	3,099	·10056	6·16
29.....	94,594	316	·00334	41·99	80.....	27,716	3,045	·10987	5·79
30.....	94,278	317	·00336	41·13	81.....	24,671	2,955	·11977	5·45
31.....	93,961	319	·00339	40·27	82.....	21,716	2,829	·13025	5·12
32.....	93,642	321	·00343	39·41	83.....	18,887	2,668	·14126	4·81
33.....	93,321	327	·00350	38·54	84.....	16,219	2,478	·15281	4·52
34.....	92,994	332	·00357	37·67	85.....	13,741	2,267	·16497	4·25
35.....	92,662	339	·00366	36·81	86.....	11,474	2,040	·17783	3·99
36.....	92,323	348	·00377	35·94	87.....	9,434	1,806	·19147	3·74
37.....	91,975	361	·00392	35·07	88.....	7,628	1,571	·20592	3·51
38.....	91,614	376	·00410	34·21	89.....	6,057	1,340	·22120	3·29
39.....	91,238	393	·00431	33·35	90.....	4,717	1,120	·23734	3·09
40.....	90,845	412	·00454	32·49	91.....	3,597	915	·25437	2·89
41.....	90,433	434	·00480	31·64	92.....	2,682	730	·27232	2·71
42.....	89,999	457	·00508	30·79	93.....	1,952	568	·29121	2·54
43.....	89,542	481	·00537	29·94	94.....	1,384	431	·31106	2·38
44.....	89,061	503	·00565	29·10	95.....	953	316	·33192	2·22
45.....	88,558	530	·00598	28·26	96.....	637	225	·35380	2·08
46.....	88,028	559	·00635	27·43	97.....	412	155	·37673	1·94
47.....	87,469	597	·00682	26·60	98.....	257	103	·40073	1·82
48.....	86,872	639	·00736	25·78	99.....	154	66	·42585	1·70
49.....	86,233	688	·00798	24·97	100.....	88	40	·45209	1·58
50.....	85,545	742	·00867	24·17	101.....	48	23	·47949	1·48
51.....	84,803	798	·00941	23·37	102.....	25	13	·50808	1·38
52.....	84,005	857	·01020	22·59	103.....	12	6	·53789	1·28
53.....	83,148	917	·01103	21·82	104.....	6	3	·56893	1·19
54.....	82,231	979	·01190	21·06	105.....	3	2	·60124	1·11
55.....	81,252	1,043	·01284	20·30	106.....	1	1	·63485	1·03

TABLE 9. Life Tables, (A) Males, (B) Females, based on population and deaths of the Registration Area of 1921¹ in each of the years 1921 and 1931—Con.

Age x	(B) Females				Age x	(B) Females			
	l_x	d_x	q_x	e_x		l_x	d_x	q_x	e_x

1931

5.....	100,000	173	.00173	64.58	57.....	80,950	1,035	.01279	19.80
6.....	99,827	145	.00145	63.69	58.....	79,915	1,114	.01394	19.05
7.....	99,682	127	.00127	62.78	59.....	78,801	1,196	.01518	18.31
8.....	99,555	116	.00117	61.86	60.....	77,605	1,281	.01651	17.59
9.....	99,439	113	.00114	60.94	61.....	76,324	1,369	.01794	16.87
10.....	99,326	116	.00117	60.00	62.....	74,955	1,459	.01947	16.17
11.....	99,210	121	.00122	59.07	63.....	73,496	1,543	.02100	15.48
12.....	99,089	128	.00129	58.15	64.....	71,953	1,622	.02254	14.80
13.....	98,961	135	.00136	57.22	65.....	70,331	1,703	.02422	14.13
14.....	98,826	144	.00146	56.30	66.....	68,628	1,797	.02619	13.47
15.....	98,682	155	.00157	55.38	67.....	66,831	1,911	.02860	12.82
16.....	98,527	168	.00171	54.47	68.....	64,920	2,034	.03133	12.18
17.....	98,359	183	.00186	53.56	69.....	62,886	2,154	.03426	11.56
18.....	98,176	201	.00205	52.66	70.....	60,732	2,284	.03760	10.96
19.....	97,975	223	.00228	51.76	71.....	58,448	2,428	.04154	10.36
20.....	97,752	246	.00252	50.88	72.....	56,020	2,593	.04628	9.79
21.....	97,506	267	.00274	50.01	73.....	53,427	2,778	.05200	9.24
22.....	97,239	283	.00291	49.14	74.....	50,649	2,967	.05857	8.72
23.....	96,956	293	.00302	48.29	75.....	47,682	3,134	.06572	8.23
24.....	96,663	299	.00309	47.43	76.....	44,548	3,259	.07316	7.78
25.....	96,364	304	.00315	46.58	77.....	41,289	3,330	.08064	7.35
26.....	96,060	306	.00319	45.72	78.....	37,959	3,341	.08801	6.95
27.....	95,754	310	.00324	44.87	79.....	34,618	3,305	.09547	6.58
28.....	95,444	314	.00329	44.01	80.....	31,313	3,232	.10320	6.22
29.....	95,130	317	.00333	43.15	81.....	28,081	3,128	.11140	5.87
30.....	94,813	320	.00337	42.30	82.....	24,953	3,001	.12027	5.55
31.....	94,493	324	.00343	41.44	83.....	21,952	2,851	.12987	5.24
32.....	94,169	332	.00353	40.58	84.....	19,101	2,676	.14008	4.95
33.....	93,837	347	.00370	39.72	85.....	16,425	2,477	.15080	4.67
34.....	93,490	366	.00391	38.87	86.....	13,948	2,258	.16191	4.41
35.....	93,124	386	.00414	38.02	87.....	11,690	2,026	.17332	4.17
36.....	92,738	402	.00434	37.17	88.....	9,664	1,789	.18512	3.93
37.....	92,336	413	.00447	36.33	89.....	7,875	1,555	.19742	3.71
38.....	91,923	412	.00448	35.49	90.....	6,320	1,329	.21030	3.50
39.....	91,511	403	.00440	34.65	91.....	4,991	1,117	.22386	3.30
40.....	91,108	392	.00430	33.80	92.....	3,874	923	.23819	3.11
41.....	90,716	386	.00426	32.95	93.....	2,951	748	.25340	2.93
42.....	90,330	392	.00434	32.09	94.....	2,203	594	.26956	2.76
43.....	89,938	412	.00458	31.22	95.....	1,609	461	.28679	2.59
44.....	89,526	440	.00491	30.36	96.....	1,148	350	.30517	2.43
45.....	89,086	473	.00531	29.51	97.....	798	259	.32480	2.27
46.....	88,613	509	.00574	28.67	98.....	539	186	.34578	2.13
47.....	88,104	543	.00616	27.83	99.....	353	130	.36819	1.99
48.....	87,561	573	.00654	27.00	100.....	223	87	.39214	1.85
49.....	86,988	600	.00690	26.17	101.....	136	57	.41772	1.72
50.....	86,388	629	.00728	25.35	102.....	79	35	.44502	1.60
51.....	85,759	665	.00775	24.53	103.....	44	21	.47414	1.49
52.....	85,094	709	.00833	23.72	104.....	23	12	.50518	1.37
53.....	84,385	763	.00904	22.92	105.....	11	6	.53822	1.27
54.....	83,622	823	.00984	22.12	106.....	5	3	.57337	1.16
55.....	82,799	889	.01074	21.34	107.....	2	1	.61071	1.05
56.....	81,910	960	.01172	20.56	108.....	1	1	.65035	.90

TABLE 10. Probabilities of dying within one year, (A) Males, (B) Females, based on population and deaths of the Registration Area of 1921 for the decennium 1921 to 1931

Age x	q_x		Age x	q_x	
	(A) Males	(B) Females		(A) Males	(B) Females
5.....	·00278	·00249	53.....	·01058	·00984
6.....	·00255	·00221	54.....	·01160	·01064
7.....	·00234	·00198	55.....	·01272	·01153
8.....	·00215	·00181	56.....	·01393	·01250
9.....	·00200	·00169	57.....	·01520	·01356
10.....	·00190	·00163	58.....	·01645	·01465
11.....	·00185	·00162	59.....	·01769	·01576
12.....	·00186	·00165	60.....	·01905	·01699
13.....	·00195	·00173	61.....	·02064	·01841
14.....	·00211	·00186	62.....	·02256	·02010
15.....	·00232	·00203	63.....	·02485	·02206
16.....	·00252	·00222	64.....	·02743	·02425
17.....	·00270	·00240	65.....	·03026	·02665
18.....	·00285	·00259	66.....	·03329	·02925
19.....	·00300	·00280	67.....	·03649	·03204
20.....	·00313	·00301	68.....	·03968	·03485
21.....	·00325	·00320	69.....	·04290	·03768
22.....	·00334	·00336	70.....	·04640	·04079
23.....	·00339	·00347	71.....	·05042	·04444
24.....	·00342	·00354	72.....	·05522	·04888
25.....	·00342	·00359	73.....	·06085	·05415
26.....	·00342	·00364	74.....	·06714	·06009
27.....	·00343	·00370	75.....	·07401	·06662
28.....	·00343	·00377	76.....	·08139	·07368
29.....	·00341	·00383	77.....	·08920	·08119
30.....	·00339	·00390	78.....	·09735	·08909
31.....	·00341	·00399	79.....	·10589	·09743
32.....	·00347	·00410	80.....	·11496	·10631
33.....	·00359	·00425	81.....	·12468	·11582
34.....	·00376	·00442	82.....	·13519	·12607
35.....	·00395	·00461	83.....	·14632	·13712
36.....	·00416	·00479	84.....	·15798	·14890
37.....	·00437	·00495	85.....	·17043	·16132
38.....	·00457	·00507	86.....	·18389	·17429
39.....	·00478	·00515	87.....	·19861	·18773
40.....	·00500	·00524	88.....	·21474	·20156
41.....	·00524	·00535	89.....	·23209	·21586
42.....	·00550	·00552	90.....	·25046	·23072
43.....	·00578	·00575	91.....	·26966	·24622
44.....	·00608	·00602	92.....	·28950	·26243
45.....	·00639	·00633	93.....	·30978	·27944
46.....	·00674	·00667	94.....	·33032	·29734
47.....	·00714	·00702	95.....	·35091	·31620
48.....	·00755	·00737	96.....	·37136	·33611
49.....	·00796	·00771	97.....	·39149	·35715
50.....	·00842	·00810	98.....	·41109	·37940
51.....	·00899	·00856	99.....	·42998	·40294
52.....	·00970	·00914	100.....	·44796	·42785

APPENDIX

POPULATION AND DEATHS ON WHICH PRECEDING TABLES ARE BASED

TABLE A.—POPULATION, BY QUINQUENNIAL AGE GROUPS AND SEX, CANADA AND REGIONAL DIVISIONS, 1931

Age Group	Canada ¹	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia
MALES						
All ages.....	5,306,502	517,116	1,447,124	1,748,844	1,268,199	385,219
0-4.....	542,294	55,581	177,556	156,121	120,984	26,152
5-9.....	571,671	59,428	178,150	168,734	135,275	30,084
10-14.....	542,192	57,208	158,149	161,623	135,032	30,180
15-19.....	524,607	53,957	147,539	163,315	127,991	31,805
20-24.....	463,120	44,308	130,733	147,669	111,355	29,055
25-29.....	409,412	33,066	113,135	135,898	98,500	28,813
30-34.....	367,579	29,681	98,202	128,750	84,056	26,287
35-39.....	358,582	30,366	89,145	125,702	85,789	27,580
40-44.....	347,251	27,391	78,685	117,980	89,823	33,375
45-49.....	321,058	26,195	68,576	108,017	85,097	34,473
50-54.....	296,861	23,936	57,900	91,564	64,052	28,809
55-59.....	198,760	19,854	45,081	70,273	43,570	19,982
60-64.....	156,529	17,470	35,298	57,740	30,806	15,215
65-69.....	120,473	14,321	27,399	46,210	22,270	10,273
70-74.....	88,454	11,077	20,218	35,370	15,250	6,539
75-79.....	49,968	7,183	12,040	19,702	7,692	3,351
80-84.....	23,853	3,833	6,132	9,281	3,236	1,371
85-89.....	8,690	1,605	2,116	3,400	1,137	402
90-94.....	2,048	418	510	810	216	94
95-99.....	417	98	98	148	57	18
100 and over.....	74	15	8	22	21	8
Not stated.....	2,642	127	357	515	290	1,353
FEMALES						
All ages.....	4,996,331	491,987	1,427,131	1,682,839	1,085,330	309,044
0-4.....	530,436	54,409	175,339	151,548	123,313	25,827
5-9.....	559,373	57,635	175,593	164,208	132,772	29,065
10-14.....	530,455	55,543	157,660	156,634	130,975	29,643
15-19.....	513,756	51,095	152,319	155,573	124,228	30,541
20-24.....	447,001	40,307	136,383	143,512	99,997	26,742
25-29.....	375,882	31,845	113,287	128,780	79,342	22,628
30-34.....	340,249	29,121	95,976	123,383	70,129	21,640
35-39.....	329,012	29,435	84,623	120,947	70,716	22,991
40-44.....	298,019	25,642	74,005	110,565	65,069	22,738
45-49.....	265,411	24,085	62,969	98,114	56,639	21,013
50-54.....	221,133	21,235	52,729	86,065	43,222	17,891
55-59.....	167,708	17,876	41,894	66,817	28,807	12,314
60-64.....	137,558	15,503	34,002	57,186	21,569	9,298
65-69.....	110,380	13,413	27,304	46,501	16,230	6,932
70-74.....	82,980	10,254	20,135	36,209	11,644	4,738
75-79.....	48,591	7,177	12,375	20,282	6,280	2,477
80-84.....	25,277	4,237	6,581	10,470	2,799	1,103
85-89.....	10,480	2,150	2,471	4,296	1,072	463
90-94.....	2,880	705	658	1,116	277	124
95-99.....	655	164	139	250	79	23
100 and over.....	89	25	14	28	10	6
Not stated.....	1,026	62	293	356	158	157

¹Excluding Yukon and the Northwest Territories.

TABLE B.—REGISTERED DEATHS, BY QUINQUENNIAL AGE GROUPS AND SEX, CANADA AND REGIONAL DIVISIONS, 1930-32

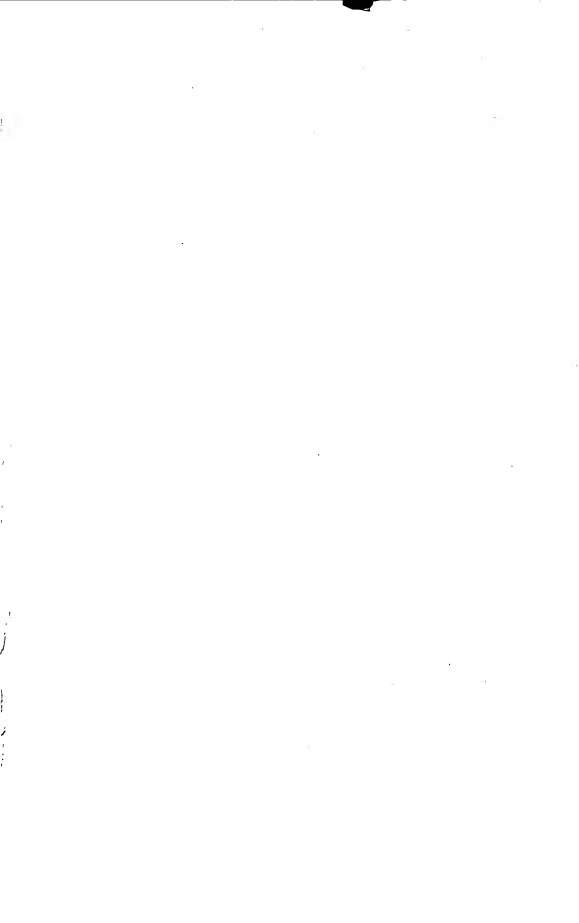
Age Group	Canada ¹	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia
MALES						
All ages.....	171,791	18,627	54,105	58,160	29,306	11,473
0-4.....	42,486	4,197	19,794	9,885	7,422	1,188
5-9.....	3,806	375	1,486	1,005	712	228
10-14.....	2,581	259	852	730	592	148
15-19.....	3,975	479	1,252	1,146	827	271
20-24.....	4,603	532	1,520	1,333	804	354
25-29.....	4,165	424	1,250	1,337	794	360
30-34.....	3,911	369	1,210	1,329	698	335
35-39.....	4,715	438	1,387	1,605	874	411
40-44.....	5,675	460	1,571	1,947	1,139	568
45-49.....	6,936	559	1,689	2,421	1,487	780
50-54.....	8,508	762	2,128	3,009	1,655	964
55-59.....	9,285	857	2,281	3,446	1,759	943
60-64.....	10,843	1,077	2,685	4,208	1,860	1,013
65-69.....	13,088	1,467	3,201	5,238	2,131	1,081
70-74.....	15,083	1,711	3,679	6,261	2,388	1,044
75-79.....	13,726	1,737	3,501	5,724	1,920	844
80-84.....	10,188	1,538	2,655	4,112	1,504	579
85-89.....	5,559	923	1,422	2,312	861	239
90-94.....	1,916	358	464	817	192	85
95-99.....	440	87	105	180	53	15
100 and over.....	90	14	10	39	17	10
Not stated.....	211	22	23	76	47	43
FEMALES						
All ages.....	146,409	16,819	49,355	51,327	21,717	7,191
0-4.....	33,035	3,299	15,419	7,685	5,683	949
5-9.....	2,938	279	1,260	665	558	170
10-14.....	2,434	245	934	580	502	167
15-19.....	3,030	422	1,448	871	662	227
20-24.....	4,399	528	1,685	1,185	755	246
25-29.....	4,329	478	1,685	1,209	694	263
30-34.....	4,202	419	1,569	1,278	705	233
35-39.....	4,714	496	1,536	1,672	828	282
40-44.....	4,801	448	1,585	1,620	926	312
45-49.....	5,409	512	1,601	1,983	910	403
50-54.....	6,142	589	1,659	2,416	1,054	424
55-59.....	6,903	719	1,885	2,840	1,007	452
60-64.....	8,422	961	2,386	3,494	1,109	532
65-69.....	10,474	1,158	2,835	4,506	1,380	589
70-74.....	12,510	1,402	3,365	5,619	1,625	599
75-79.....	12,290	1,551	3,317	5,452	1,402	568
80-84.....	10,109	1,496	2,704	4,385	1,041	393
85-89.....	6,263	1,129	1,637	2,673	564	260
90-94.....	2,472	535	581	1,054	212	90
95-99.....	700	185	140	279	69	21
100 and over.....	113	27	19	42	17	8
Not stated.....	30	1	3	15	8	3

¹ Excluding Yukon and the Northwest Territories.

TABLE C.—POPULATION AND REGISTERED DEATHS, BY QUINQUENNIAL AGE GROUPS AND SEX, 1921 AND 1931, REGISTRATION AREA¹ OF 1921

Age Group	1931				1921				1921-1931	
	Population		Deaths		Population		Deaths		Deaths ²	
	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males
All ages.....	3,919,378	3,569,200	38,462	31,568	3,342,969	3,072,170	36,411	31,311	759,385	644,935
0-4.....	364,738	355,097	7,629	5,942	374,517	365,321	10,827	8,303	178,292	139,897
5-9.....	393,521	383,680	742	497	375,106	366,797	1,166	979	18,354	15,124
10-14.....	384,043	372,795	534	489	323,528	314,160	674	611	13,499	11,610
15-19.....	377,098	361,437	867	677	282,880	275,215	866	741	17,777	15,298
20-24.....	332,387	310,818	988	894	252,822	245,413	947	946	19,461	18,908
25-29.....	296,277	282,595	971	851	262,860	249,555	1,043	1,034	19,239	18,975
30-34.....	269,374	244,273	929	870	255,964	231,673	999	1,049	18,794	19,647
35-39.....	260,437	244,089	1,064	1,085	260,830	220,812	1,260	1,220	23,616	22,991
40-44.....	268,569	224,014	1,372	989	224,721	182,440	1,250	1,072	27,224	22,593
45-49.....	262,382	200,451	1,733	1,238	184,027	149,075	1,340	1,065	31,307	24,637
50-54.....	208,961	168,413	2,135	1,414	161,774	126,329	1,488	1,287	35,277	27,161
55-59.....	153,679	125,814	2,309	1,617	113,614	98,837	1,720	1,336	40,772	30,615
60-64.....	121,231	103,556	2,661	2,033	98,565	83,578	2,111	1,651	49,729	38,080
65-69.....	93,074	83,079	3,218	2,417	68,022	59,519	2,269	1,972	59,463	46,257
70-74.....	68,239	62,845	3,657	2,968	44,728	41,348	2,539	2,181	63,714	52,043
75-79.....	37,928	36,216	3,250	2,988	26,498	26,395	2,368	2,132	59,091	52,234
80-84.....	17,721	18,096	2,407	2,348	13,030	14,654	1,827	1,796	44,438	44,038
85-89.....	6,544	7,989	1,339	1,477	5,465	6,197	1,136	1,208	26,039	28,583
90-94.....	1,538	2,222	455	570	1,331	1,825	361	516	9,150	11,714
95-99.....	319	516	106	168	325	438	104	148	2,331	3,392
100 and over.....	68	75	24	28	74	74	37	35	583	684
Not stated.....	2,285	733	67	9	4,682	3,700	89	29	1,642	454

¹ Canada excluding Quebec, Yukon and the Northwest Territories.² Obtained by adding to the deaths of 1922-1930 inclusive one-half the deaths of 1921 and 1931.



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